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NOVEMBER, 1935

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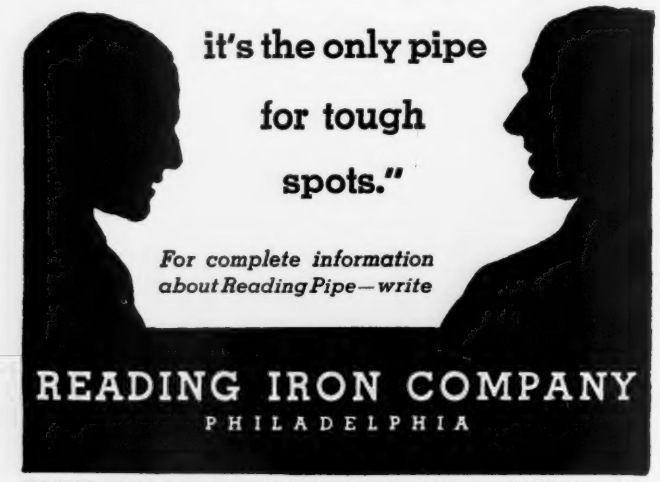

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THE FIRST CONVENTION

AN OCCASION TO BE RECORDED

Columbus the Perfect Host Extends Unusual Greeting

WHEN time and circumstance shall have combined to establish engineering as a profession worthy of its high purpose in the scheme of human affairs, the first convention of the National Society of Professional Engineers will afford the chronicler of its history an inspiration compatible with the magnitude of his task.

One might search long and diligently to uncover another initial convention of professional man held under such auspicious circumstances. The Ohio Society of Professional Engineers, the Ohio State Board of Engineering Examiners, the Chamber of Commerce, governmental agencies and officials, the public, the press and the broadcasting stations of the capital city of Ohio vied with one another in promoting the success of the convention and in extending a welcome that will not soon be forgotten by those who were present. On page 6 is to be found a picture which indicates that the greeting of the City of Columbus was both cordial and official.

The welcome of the perfect host was matched by the zeal and unselfish purpose of those who, at a considerable personal sacrifice of time and of money, visited Columbus for the purpose of attesting their interest and faith in the National Society. It is safe to venture the opinion that if Columbus captivated the visiting engineer, the latter left an indelible impression of sincerity and soundness of purpose upon his professional brother of Ohio.

An evidence of the reaction of the public to the program of the National Society may be gleaned from the following editorial which appeared in the Columbus Despatch of October 25th:

THE ENGINEER

Columbus this week became the birthplace of a national organization. The physicians and surgeons have their Medical and Surgical associations. The Bankers have their American Bankers' association; there are many national groups that have recognized their responsibilities as distinctive contributors to the general welfare, and that is all to the good.

The profession of engineering, hitherto unorganized on a national scale, chose this city for its birthplace as an entity in the same rank. Compared with the modern practice of law and medicine, engineering is a youthful profession. If engineering is the application of scientific principles to industry, it dates back to the development of railroading and modern discoveries in the field of mass production and electrical invention.

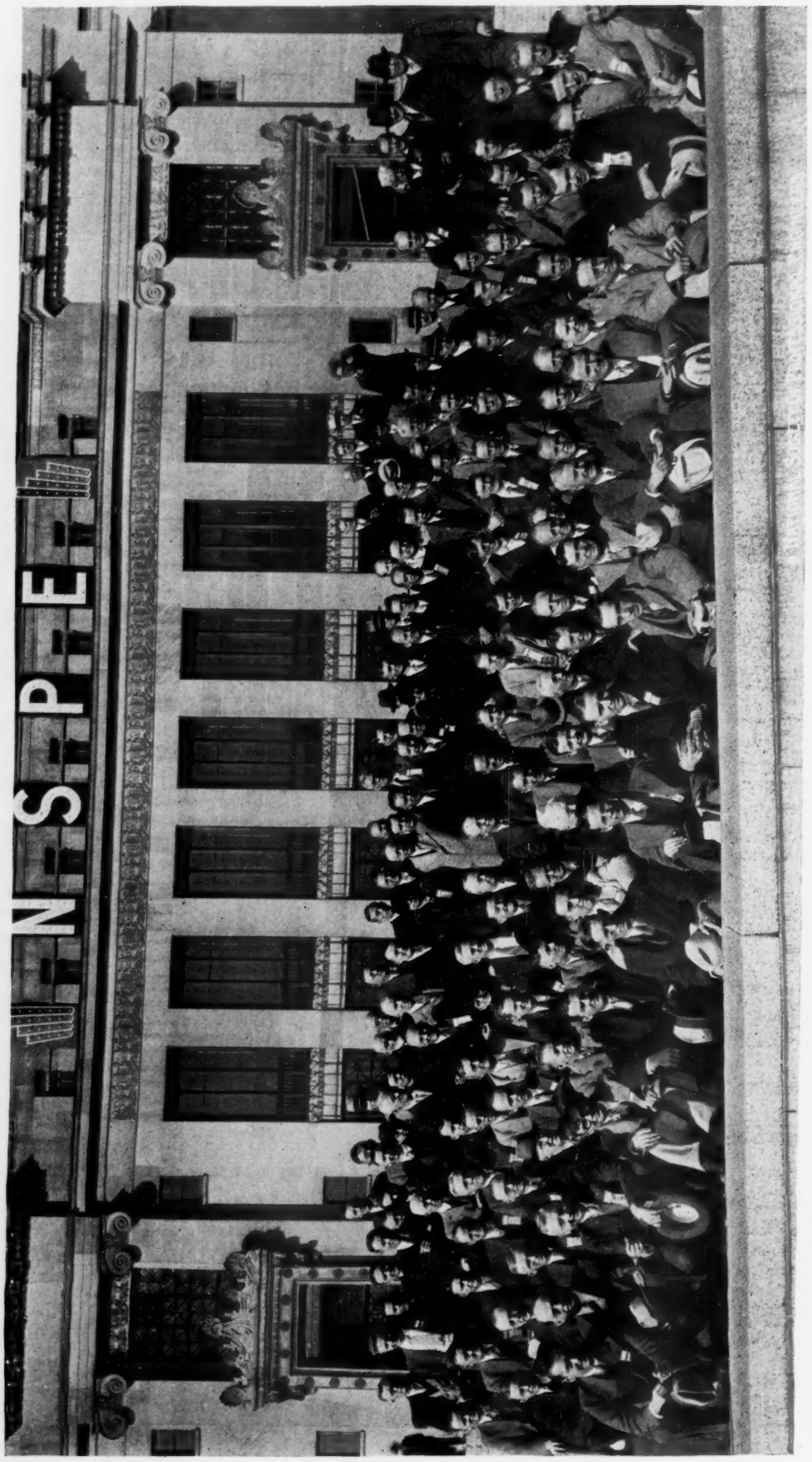
Once concerned only with the production of raw materials, it is now the patron of a thousand products of the machine and the laboratory; it has transformed America from a wilderness populated by the Indian and the buffalo to a republic famous for the highest standard of material civilization known to history.

Exhibits portraying this advance are now on display in the Deshler Wallick hotel lobby. We think it is worth anyone's time to see the part played by the various branches of engineering in the manufacture, for instance, of a common lead pencil. This is but a parable of what the engineers have done for America and but a hint of what they can do for the future.

The convention was more than a formal gathering of engineers. It afforded a common meeting ground for persons who envision a nation better for having availed itself of the knowledge born of engineering experience. No one who was present could fail to recognize that the profession in Ohio is socially minded and bent on making the public engineering minded. In this it is setting an example that merits emulation upon the part of the engineer in other states of the union.

From every quarter there were manifested confidence in, and militant support for, the philosophy of the professional movement as enunciated by the National Society of Professional Engineers, which neither distinguishes nor rewards its members. Service to the profession appears sufficient to cause men to make heavy sacrifices without hope of return. Such is the spirit which, at the Directors' meeting on October 24th, prompted four men, from four different state societies, to voluntarily subscribe one thousand dollars toward expanding the activities of the Society. Such also is the spirit which underlies the New Deal in engineering and which will make vain the soft spoken hopes of those who lacking the frankness to challenge its philosophy would nevertheless place obstacles in its path.

To the Ohio Society, which sponsored the convention, the American Engineer records its own word of appreciation and ventures the opinion that every man who attended is better for having tasted the atmosphere created by those genuine and wholesome fellows who made possible this memorable occasion. To quote President Steinman—"In 1492 Columbus discovered America—In 1935 Columbus discovered the Professional Engineer."



PHOTOGRAPH OF GROUP TAKEN IN FRONT OF CITY HALL,
OCTOBER 24, 1935, COLUMBUS CONVENTION, N.S.P.E.,
SHOWING OFFICIAL GREETING

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THE NATIONAL SOCIETY CONVENES

Holds First Annual Meeting
October 23, 24, 25, 1935

A Brief Summary Together With Minutes Thereof

THE first Annual Convention of the National Society of Professional Engineers was held at the Deshler-Wallick Hotel, Columbus, Ohio on October 23rd, 24th, and 25th; also convening at the same time and place was the National Council of State Boards of Engineering Examiners. The attendance was approximately 1250, consisting of representatives from all parts of the country. Over 900 registered.

Joint sessions were held Wednesday afternoon and evening under the auspices of the National Council, and on Thursday afternoon and evening under the auspices of the National Society. The details of the convention were prepared by the Ohio Society of Professional Engineers, which as a member body of the National Society acted as host.

Addresses of welcome were delivered on October 23rd by State and City officials, with responses by Professor N. W. Dougherty of Tennessee, of the National Council, and Major Thomas W. Battin, Vice-President of the National Society.

The City of Columbus outdid itself in greeting the convention representatives. The City Hall and other prominent buildings contained stationary and moving electric display signs of welcome. Radio addresses were delivered over Station WBNS, the Columbus member of the Columbia Broadcasting System, by Engineer D. B. Steinman and Engineer A. V. Sheridan. The joint meeting on Thursday afternoon was addressed by Engineer Steinman on the subject of "The National Society and Professional Consciousness." The banquet held on Thursday evening at the Deshler-Wallick Hotel was attended by more than 500 engineers. The addresses at the said banquet were delivered by Dr. Robert Williams, President of Ohio Northern University, whose theme was "The Future of Society." Mr. A. V. Sheridan, Editor of the American Engineer, who spoke on "The Engineer as a Member of Society," and the Hon. A. J. Weaver, former Governor of Nebraska, and Chairman of the Mississippi and Missouri Waterways Conservation and Improvement Committee, whose topic was "The Conservation of National Resources." Major Norman Emrie, Editor of the Columbus Dispatch acted as Toastmaster. A complete program of entertainment was also presented during the banquet.

On Friday receptions were held at the Ohio State University, the Ohio State Highway Department, and the Executive Chambers of the Governor.

The Ohio Society provided the various committees, of which A. F. Unckrich was Chairman of the Entertainment, E. G. Cantwell, in charge of Reception, and T. A. Brannon, in charge of Transportation. Perry T. Ford was General Chairman of the convention, and presented the Presiding Officers of the different sessions.

Some of the important items are as follows:

This was the first state or national gathering of engineers wherein the title "Engineer" as a form of address was made the order of the day and required of all representatives in and out of the convention.

Copies of the more important resolutions as adopted are to be found in this issue. Of these, the only one provocative of lengthy discussion and indicative of a division of opinion was that concerning the statement wherein the Society makes public announcement that engineers have not been accorded adequate recognition in planning and determining the policies of work programs. A show of hands to determine the result, however indicated a majority of 5 to 1 in favor of the same. Other resolutions provoked discussion but were adopted without modification, whereas the controversial one was modified and adopted in the form herewith attached.

The officers elected for the coming year were D. B. Steinman of New York, President; Thomas W. Battin, of Pennsylvania, First Vice-President; Hugh A. Kelly of New Jersey, Second Vice-President; Perry T. Ford, of Ohio, Treasurer. In all 1193 votes were cast, of which a total of 63 for all candidates were scattering, the remainder being more or less unanimous for the men elected. The society voted to hold its next annual convention at Washington, D. C. The Board of Directors at a subsequent meeting selected Willard S. Conlon of Washington, D. C. as Secretary. At this meeting Engineers Steinman, Kelly, Moulding and Sacks subscribed $1,000 to advance the activities of the society. With such spirit and such men how can a movement fail.

MINUTES IN BRIEF

From Report of Secretary

The minutes of the meeting as prepared by Secretary Willard S. Conlon of Washington constitute a well prepared document of some fifty pages. Space permits only the publication of the following skeleton which has been abstracted from the Report.

MINUTES OF MEETING OF THE CONVENTION

October 23, 24, 25, 1935

Columbus, Ohio

October 23rd, 10 A. M.—The business meetings scheduled for October 23rd were cancelled in order that the members of N.S.P.E. could attend the business ses-

sions of the National Council of State Boards of Engineering Examiners.

2 P. M.—Welcome to Ohio and City of Columbus.

Engineer Perry Ford, General Chairman of the Convention Committee, welcomed the delegates and members of N.S.P.E. and N.C.S.B.E.E. to Columbus, and presented to the meeting the representatives of the Governor of Ohio and the Mayor of Columbus. The welcome to the State of Ohio was presented by Mr. John J. Jaster, Jr., Director of Highways, on behalf of the Governor, and the welcome of the City of Columbus was presented by Mr. Robert J. Beatty, secretary of the Mayor of Columbus. Engineers T. W. Battin, of Pennsylvania, and N. W. Dougherty, of Tennessee, responded for the National Society of Professional Engineers, and the National Council of State Boards of Engineering Examiners, respectively.

Mr. Donald W. Springer, Executive Secretary of the American Society of Certified Public Accountants of Washington, D. C., presented an excellent address on professional organizations.

The meeting was adjourned at 2:45 P.M., and the N.S.P.E. members attended a business meeting of the N.C.S.B.E.E.

October 24th, 10:15 A. M.—President Engineer D. B. Steinman called the first business meeting of N. S. P. E. to order, and delivered the welcoming address.

No. 1 Communications—Communications certifying delegates to the convention were received. Communications relative to the 1936 Convention were received and placed on file.

No. 2 Convention Committees—Appointment of Committees. President Engineer Steinman appointed the following special convention-committees: (a) Tellers Committee, Chairman Engineer George Diehle, N. Y.; and Engineers Wade Shidler, Ohio, and S. W. Moulding, D. C. (b) Resolutions committee: Chairman Engineer A. V. Sheridan, Bronx, N. Y.; and Engineers S. I. Sacks, Penn., and W. S. Kammerer, Ohio. (c) 1936 Convention Committee: Chairman Engineer T. W. Battin, Penn., and Engineers E. G. Cantwell, Ohio, H. A. Kelly, N. J., and H. E. Babbitt, Ill.

The special committees were instructed to have their reports compiled and ready for action at the afternoon session.

No. 3 Committees—Reports of Standing and Special Committees. (a) Legislative Committee Report: The report of the Legislative Committee was presented by Chairman Engineer Arnold G. Chapman, adopted on motion made by Engineer W. H. Yates, and seconded by Engineer C. E. Bently.

(b) Public Relations—Committee Report. Chairman Engineer H. E. Babbitt presented the report which was adopted on a motion made by Engineer G. Diehle, and seconded by Engineer W. H. Yates.

(c) Publication—Committee Report. Chairman and Editor Engineer Arthur V. Sheridan presented the report, which was adopted on a motion made by Engineer A. G. Chapman and seconded by Engineer S. I. Sacks. Considerable discussion preceded the adoption of this report. The desirability of County Chapters and State Societies directing the talents of their members toward editing and submitting acceptable material was advocated by Engineer Sheridan, concurred in and amplified by Engineers Chapman, Diehle and Eilers.

(d) Emblems—Special Committee Report. Engineer Ernest F. Fox, Vice-Chairman of this Committee, presented the report in the absence of the Chairman Engineer Raphael J. Smyth. The report was adopted on a motion made by Engineer H. A. Kelly and seconded by Engineer T. W. Battin. Preceding the adoption of the report there was considerable discussion by Engineers S. I. Sacks, and Yates.

No. 4—Certificates. Engineer E. F. Fox described the mechanics and expenses involved in handling the certificates. Engineer Babbitt presented, and Engineer Yates seconded, a motion which was adopted, as follows:

Resolved, that on and after January 1st, 1936, the Society shall collect a fee for each certificate issued, and that the Executive Committee shall have the power to set such fee which shall be sufficient to defray the total cost of handling certificates.

No. 5. Constitution—Abrogation of Membership Section in Part. Engineer Babbitt inquired as to what action the Society would take with regard to the Illinois Society after January 1st, 1937. The following resolution was presented by Engineer Yates, seconded by Engineer Sheridan and adopted.

Resolved, that this convention by unanimous consent hereby delegates to the Board of Directors the power to abrogate in part that section of the constitution which applies to membership qualifications.

No. 6. State Societies—Reports. (a) Pennsylvania State Society—Accomplishments. Engineer S. I. Sacks presented a report on accomplishments of the Pennsylvania Society of Professional Engineers. This report was adopted.

(b) New York State Society—Report of development. Engineer E. F. Fox, Financial Secretary, of the New York State Society of Professional Engineers in the absence of President, Engineer Riedel presented a report of the development of the Society which was adopted.

(c) Illinois Activities. Engineer H. E. Babbitt, in his report on Public Relations included activities and accomplishments of Illinois Chapters.

No. 7. Photograph—Engineer Yates presented a motion to the effect that a group photograph be made on the City Hall Plaza. The motion was adopted and Engineer Yates was delegated to make the necessary arrangements.

No. 8. Acting Secretary and Treasurer's Report—Engineer W. S. Conlon, Acting Secretary and Treasurer, presented briefly an outline of the projects handled by the Washington Office, including a summary of organizational and legislative activities.

No. 9. Anouncements—The Chairman announced that the Ohio Northern University Alumni would meet in Room 437 at 12:30 P.M. for a lunch and meeting.

No. 10—12 P. M. Adjournment for lunch.

No. 11—2:15 P.M. Assembly. Almost 200 members and delegates assembled at the City Hall Plaza, at which time a group photograph was made.

No. 12—2:30 P.M. Convention reconvened. President, Engineer Steinman presiding.

No. 13—Entertainment. A trio of engineers from the Ohio State Highway Department, members of the Ohio Society of Professional Engineers, furnished a musical treat in vocal numbers, accompanied at the piano by another engineer from the Highway Department. The entertainers were: Engineers Robert Laudenbeck, Dale Marshall, Walter Graff, and Robert Thompson.

No. 14. President's Message—President Engineer Steinman reviewed the accomplishments of N.S.P.E. in an excellent and inspiring address, which was received with great enthusiasm by the Convention.

No. 15. New Business. Reports of Committees. (a) Resolutions Committee: Chairman Engineer A. V. Sheridan presented the following resolutions, which were adopted by the Convention.

Resolution No .1. On the illness of Engineer Gerald W. Knight, Director of N.S.P.E. (2) To the Authorities of the City of Columbus. (3) To the Ohio Society of Professional Engineers. (4) Secretary of Public Works. (5) Use of the title "Engineer." (6) Designation of "Professional Engineer." (7) On Compilation of Roster. (8) Engineer and Works Program. (9) District of Columbia Registration. (10) Constitution—Abrogation in Part. (11) Certificates—fee. (12) Emblem—adoption.

(b) 1936 Convention—Committee Report. Chairman Engineer Battin, of the 1936 Convention Committee, presented a report recommending that the 1936 Convention of N.S.P.E. be held in Washington, D. C. The report was adopted.

(c) Teller's Report—Election of Officers for 1936. Chairman Engineer Diehle presented the report on the canvass of the ballots, which was to the effect that with scattering votes the nominees as noted on the ballot were elected. This report was adopted by the Convention, and the officers elected for the year 1936 are as follows: President, Engineer D. B. Steinman, N. Y.; First Vice-President, Engineer T. W. Battin, Penn.; Second Vice-President, Engineer H. A. Kelly, N. J.; Treasurer, Engineer P. T. Ford, Ohio.

No. 16—5 P.M.—The meeting adjourned. The chairman immediately called a meeting of the Board of Directors.

No. 17—Banquet. The first banquet of N.S.P.E. was held at the Deshler-Wallick Hotel, Grand Ballroom, and the program briefly was as follows: Entertainment, Miss Boyles and Assembly; Toastmaster, Major Norman Emrie; address, Dr. Robert Williams, President of Ohio Northern University; address, Engineer Arthur V. Sheridan, Bronx, N. Y., Editor of The American Engineer; address, Hon. A. J. Weaver, Falls City, Nebraska, formerly Governor of the State of Nebraska.

For the historical records of the Society it may be well to list those Engineers who were seated at the speaker's table: Engineers Laylin, Brannan, Maetzel, Legare', Chapman, Sours, Shidler, Major N. Emrie, Engineer Ford, Honorable A. J. Weaver, Dr. R. Williams, Engineers Reed, Steinman, Sheridan, Battin, Sacks, Kelly, Conlon.

October 25th—This day was the occasion for tours to points of interest in and about Columbus. The transportation committee of the Ohio State Society of Professional Engineers handled well this part of the program.

Secretary's Observations and Notes—Publicity: Engineers in reviewing the history of the progress which will be made in professional development, will when unrolling the scroll of the years, mark the annual convention of N.S.P.E. the major starting point of worthy accomplishments. The first time in the history of the profession a well planned and efficient publicity campaign was developed and executed. The radio, press, mail and magazines were brought into the picture in excellent harmony by Engineer Perry Ford's Committee. The effectiveness of the campaign is already in evidence in many quarters. The two most effective facilities were the radio and the press.

Radio Broadcast—Engineer Steinman broadcasted a message on the engineer and civilization over a network, (the Columbia System) through Station WBNS on October 23rd. Engineer Sheridan Broadcasted over a network, through Station WBNS on October 24th.

Press—The press cooperated excellently and the extent of the publicity and manner in which it was directed may best be observed by the results. There were approximately 160 news articles in newspapers throughout the Country including articles in several magazines. The Engineering News-Record also cooperated to the extent of announcing the Convention in three issues preceding the Convention under the heading of "Society Calendar." These issues were October 3rd, page 481; October 10th, page 521; and October 17th, page 555.

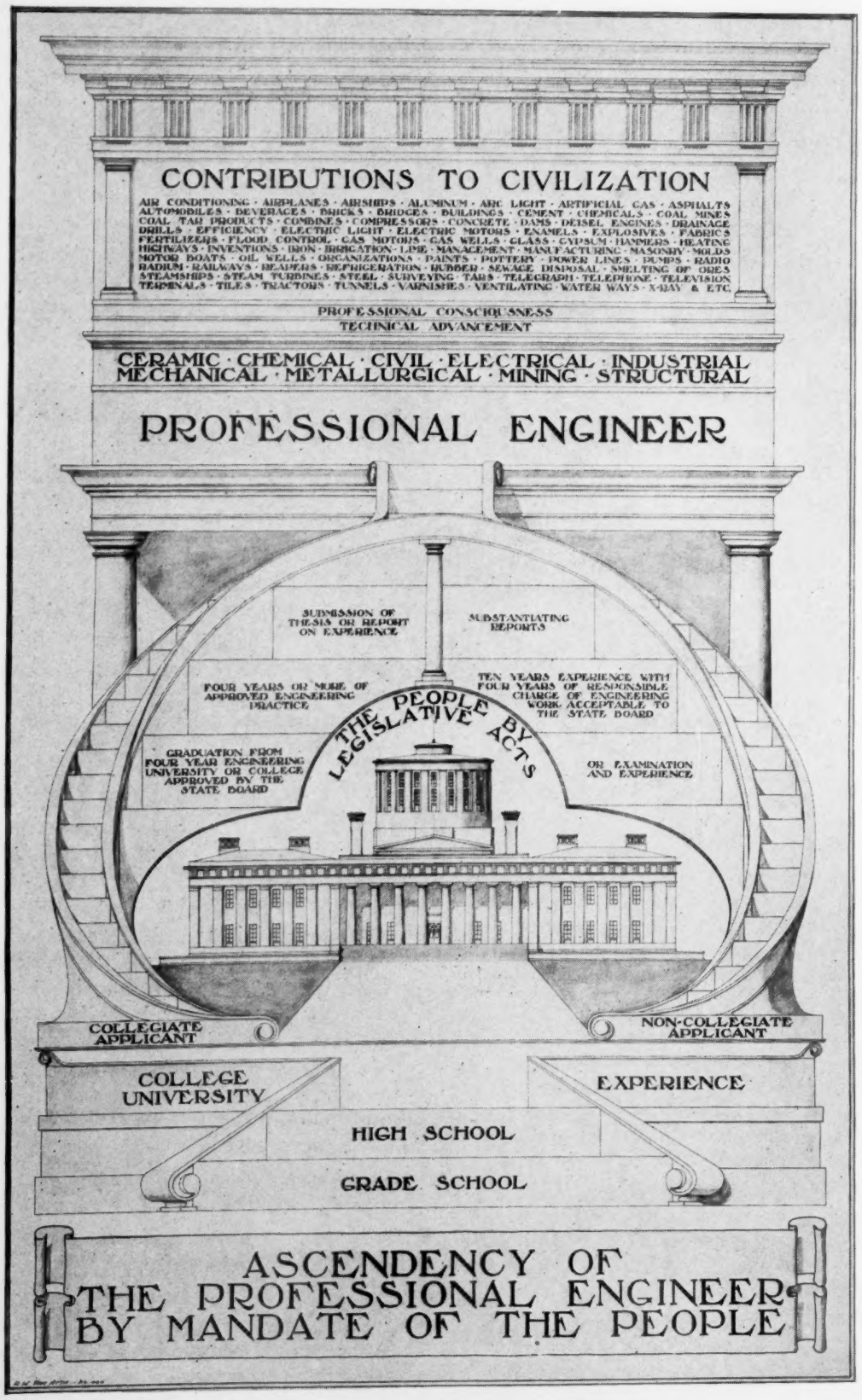
Extra—The convention was honored by the presence of two lady engineers, Ethel Steiner of Columbus, and Mildred Pfister of Cincinnati, Ohio.

The statements herewith are to the best of my knowledge and belief a true chronology of the minutes of the first annual convention of the National Society of Professional Engineers, held at the Deshler-Wallick Hotel, Columbus, Ohio, October 23, 24 and 25th, 1935.

Respectfully submitted

November 8th, 1935

Willard S. Conlon
Executive Secretary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OR EXAMINATION AND EXPERIENCE
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ASCENDENCY OF
THE PROFESSIONAL ENGINEER
BY MANDATE OF THE PEOPLE

REPRODUCTION OF PICTURE CHART
EXHIBITED BY THE OHIO SOCIETY AT THE COLUMBUS CONVENTION
N.S.P.E., 1935

SHALL REGISTRATION CLASSIFY ENGINEERS

Experiences and Conditions Reviewed

An Appeal for Unification

By
D. B. STEINMAN

ALMOST important question before the Profession today is whether Registration of Engineers should be as a single Profession or on the basis of classification into branches or specialties. Other professions, as Law and Medicine, also have their branches and subspecialties in practice, but these other professions would not consent to have the differentiation fixed and delimited by registration laws. Engineering seems to be the only profession willing (in part) to surrender to segregation and delimitation of fields of professional activity by statute.

According to the recent survey of Engineers' Registration by Dean P. H. Daggett, 23 States register Engineers without classification into branches or specialties, and only 7 States follow a procedure of classified registration. (The 5 additional registration States have incomplete registration laws.) Such non-uniformity in registration practice provides the enemies of Registration with their principal argument of attack. In the interests of consistency and uniformity, further divergence on this question of procedure should be avoided; and the Profession's adopted policy of unclassified registration, as recorded in the Model Law and as endorsed by the National Council of State Boards and the National Society of Professional Engineers, should be heeded. Professional opinion on this point should be crystallized.

The States that classify registrants are distinctly in the minority. In some of these States, classification has been arbitrarily adopted by the Boards of Examiners without authorization in their Registration Laws. In 1935, Ohio amended its law so as to legalize the classification procedure previously commenced. In the same year, Wisconsin revised its Registration Law so as to eliminate the classification previously sanctioned. None of the 7 new Registration Laws enacted in 1935 provides for classification; nevertheless, one of the newly formed State Boards, without full knowledge of the situation and without legal sanction, is proposing to start with classified registration.

Any classification or differentiation in the certification of registered Engineers is to be deplored as a step in the wrong direction, laying the foundation for future jurisdictional disputes and for disintegration of the profession. Registration should be on the basis of a single profession of engineering. Just as every lawyer or physician is trusted by statute to practice in the broad field of his profession without restriction to a branch or specialty, so every Registered Professional Engineer should be trusted to practice in the broad field of engineering without statutory delimitation. The individual engineer, knowing his own limitations and second to none in professional honor and integrity, can be trusted not to overstep the bounds.

The examinations for registration, as well as the accompanying investigation of professional record and character, should be designed to satisfy the board that the candidate can safely be entrusted to practice as a professional engineer without other limitation than his own conscience and the opinion of his fellow-engineers may prescribe.

Accordingly, the written examination should, so far as practicable, be uniform for all candidates, covering the broad fundamental training common to all branches of engineering. The differentiated part of the examination, in which the applicant is given the opportunity to show his additional more specialized training, should be reduced to a minimum.

The desired picture of a Professional Engineer, to be brought out by this plan of examination, is a man of high intellectual honesty; thoroughly trained in the common basic fundamentals underlying all engineering work, with some essential knowledge of the elements of all branches of engineering, and with additional specialized knowledge and training in one major branch of engineering. The better engineering schools have curricula designed to meet this specification. The State Boards should design their examinations to test the fulfillment of this specification. If this were universally done, every registered Professional Engineer could be certified as fully worthy of the complete trust implied, and the pressure to segregate and delimit engineering practice would be nullified.

To justify the breadth of scope of practice claimed for our profession, the qualifying examinations must be broad in scope. The range of subjects included in the examination will be compared with the range of practice claimed by the profession.

To the extent that engineering is essentially a mode of thought based on a mastery of the laws of Nature, the examinations should be basic and fundamental rather than specialized. To the extent that the greater part of engineering training is common to all engineers, without regard to branch or specialty, the greater part of the examination should be uniform for all candidates.

The essential purpose of the examination should be to test and qualify the candidate as an engineer, not as a specialist.

The important principle to record through the agency of our Registration Laws is the solidarity of our Profession. We have recorded the principle that Engineering is *one* Profession, although specialties may be many. We do not license the specialist; we license the engineer. We do not place any limitation upon the

(*Continued on page* 25)

OBLIGATIONS AND OPPORTUNITIES

Which Confront the Registered Engineer As Experienced in New Jersey

By
MORRIS GOODKIND

THE necessity for establishing legal authorization for the practice of Professional Engineering has long been recognized by engineers throughout the country, and the reasons, therefor, have been the same in New Jersey as they were in Pennsylvania or any other state in the Union. It may, however, not be amiss to outline the general principles underlying the registration movement, realizing that even though you are quite familiar with them, they are of such basic importance as to merit repetition and emphasis.

Section 1 of the Engineers Registration Act of New Jersey reads: "In order to safeguard life, health and property any person practicing or offering to practice professional engineering or land surveying in this State," etc. It is thus recognized by law that the protection of public welfare becomes the basic purpose of the regulation of the practice of engineering. To accomplish this, the law aims to eliminate the incompetent and unworthy, and to place upon the qualified the stamp of public recognition. Can there be any question as to the justice and desirability of such legislation? Yet we find that in many states strong opposition was raised to registration laws before they were finally passed, and that efforts are still being made to block the movement in several states. The pretender and impostor endanger public safety, and the untrained and inexperienced bring waste and destruction by their misapplied efforts. Regulation serves to remove these hazards and to instill confidence on the part of the public in those who have duly qualified according to the standards set up by law. The barriers which have sometimes been raised against the recognition of this principle may be gauged by the following interesting quotation from the First Annual Report of the Ohio State Board of Registration:

"The Professional Engineers and Surveyors of Ohio, for over a half century, have struggled in an effort to pass a State Engineers Registration Act in order that a professional designation might be established, recognized under the law, for the purpose of safeguarding life, health and property and to distinguish the quack and interloper from the man who, by reason of his technical training and experience, is qualified to be called an engineer or surveyor."

Fortunately, we in New Jersey have met little or no opposition in securing the enactment of a registration law. The movement was conceived in 1919 and in 1921, the act embracing all branches of engineering and land surveying was passed and signed by Governor Edwards, twelve states having preceded us in the achievement of this goal. The immediate response of engineers to the provisions of the law was most encouraging. In 1922, 658 had been qualified and registered. This was followed by 905 in 1923, bringing the total for the two years to almost 50% of the 3303 to whom licenses have been issued up to June, 1935. Of these about 1000 are non residents of the State, coming chiefly from New York and Philadelphia.

The enactment of a registration law is but the first step in establishing and maintaining a high professional standard among engineers, and in promoting the ideals and objectives of a calling so closely allied with the advancement of civilization. The engineer has ever been self-centered, satisfied to perform his individual task in a creditable manner and deriving whatever happiness he could from the successful solution of the problems within his sphere. Since earliest history his services have been dedicated to mankind, and his initiative and foresight have been in a large measure responsible for the enlightenment of nations and races. The relative status of the primitive savage and the most civilized modern society is a direct measure of the contributions made by the engineer.

It has, however, been to his discredit that he has limited his efforts and activities within the scope of scientific development. This attitude has reacted to the disadvantage of the state and brought disaster to the engineer, himself. The true engineer possesses the inherent quality of vision, and by his training and experience, has acquired the advantages of common sense, an aptitude for planning, the attribute of sound analytical judgment, and a capacity for investigation. Above all, he has proven himself of the highest integrity. Athough possessing these qualifications he has kept aloof from participation in the political, social and economic activities of his community, with the result that he now finds himself bearing the burden of destitution, arising from conditions which he might have alleviated. Fortunately these hardships have caused most of us to become social-minded and our sufferings may yet arouse us to take our proper places in the political and economic set-up of our country as leaders and directors, and not merely as agents confined to the execution of special assignments.

As a medium for attainment of these objectives, and to assist in the accomplishment of the purposes of the registration law in its broadest sense, there was organized in Trenton, on March 18, 1924, the New Jersey Society of Professional Engineers and Land Surveyors, with provision for the formation of County Chapters throughout the State. This Society was the pioneer in the organization of similiar units throughout the country and in the eventual union of all state bodies in the National Society of Professional Engineers. We are justly proud of this distinction and of the realization that the charter members are to be found among the most vigorous supporters of the aims of the National Society.

The State Association has, through concerted effort, exerted a marked influence in the attainment of public recognition and of confidence in the purposes in the Registration Law. The courts of the State cooperate fully with the licensing board and have refused to accept as expert witnesses, men who have not been qualified and registered by the State Board. The State Civil Service Commission, a body having jurisdiction over practically all non-political appointments in the state service, and in the subdivisions of the State which have adopted the principle of the Civil Service, will not certify names to positions involving responsible charge of engineering work, unless the applicants have complied with the provisions of the Registration Law. There are still a number of municipalities in the State which are not governed by the Civil Service requirements, but even in these instances the governing bodies are guided by the licensing act in their choice of appointees to engineering positions. In short, every political sub-division of the State has recognized and cooperated in the enforcement of the provisions of the Act.

In spite of an opinion by the Attorney General of the State to the effect that the law as now written exempts public utilities from its requirements, several of the largest of these companies have voluntarily accepted its provisions and have caused their engineers to comply with them, sometimes to the extent of assuming as an obligation the payment of the license fee. As a condition for promotion to positions of responsibility they insist that their men qualify under the law.

Within the past year Governor Hoffman has appointed to his technical advisory staff none but registered engineers and has filled the vacant positions on the State Licensing Board with men recommended by the State Association. Practically every movement, therefore, which has thus far been initiated by the Association toward obtaining recognition of the law has met with success in the field of public service.

We are now in a campaign to stop the misuse of the designation "Engineer" and while we recognize that our law will require extensive modification before strict enforcement of this feature can be accomplished, we have been able to limit its use through the cooperative spirit of those who were using it without intent to violate its meaning. For example, an active organization known as the Electrical Maintenance Engineer's Association of Essex County was about to launch a campaign to spread its movement throughout the state. This information was brought to the attention of the State Association and through the diplomatic efforts of a committee appointed for that purpose, the term "Engineer" has been removed from the title of that organization. Steps have been taken to have the Bell Telephone Company limit the designation "Engineer" to duly licensed men, and while the law is not sufficiently broad to enforce this condition, the company has agreed to use the title "Professional Engineer" in its regular and classified listings as applying to registered engineers only.

The Association has adopted a uniform schedule of salaries for engineering positions and a schedule of fees for engineering services together with methods for computing them. Similarly a Code of Ethics for engineering practice has been adopted and suitable committees appointed for investigating and prosecuting violations of its provisions.

Of the utmost concern to the registered engineer in New Jersey have been the repeated efforts on the part of organizations of other professions and callings to promote legislation which would restrict the field of practice for engineers. In each case, however, we have been able to exert sufficient effective opposition to defeat the purposes of these movements. The legal profession introduced proposed legislation which would make it compulsory for one of that profession to be retained at all hearings before public bodies. This would have eliminated the engineer from a field in which he has practiced for a number of years, and in which he alone is duly qualified to represent a client in meetings involving engineering features. Our major conflict has been with the New Jersey Chapter of the American Institute of Architects, who have repeatedly sought to restrict to architects the design and supervision of the construction of buildings of all types.

We have now, however, reached a point where we feel confident that this conflict with the architects will no longer occur. Within the past few months there has been organized the "Architects and Engineers Advisory Council of the State of New Jersey" made up of three members of the Institute of Architects and three members appointed by the New Jersey Association of Professional Engineers. The objectives of this Advisory Council have been set up as follows:

1. To secure the enactment of legislation for the protection of the public against exploitation.

2. To secure the enactments of legislation to protect the professional interests of both professions, particularly with respect to registration, filing plans, etc.

3. To conduct an active planned campaign of publicity on behalf of the Architects and Engineers.

4. To conduct a campaign to secure public credit and recognition for public works and to promote increased demand for competent architectural and engineering services.

5. To conduct a campaign for better standards for technical services and of compensation for these services.

6. To maintain an organization to report on and oppose any legislation, national or local, tending to injure the public interest, where Architects and Engineers may be professionally engaged.

The services of this Council have been offered to Federal and State Relief agencies and have been accepted in a very cooperative spirit. A committee of three, on which were represented both the Engineers and Architects, was formed last year with similar objectives and they reviewed over one thousand projects, fostered by the Emergency Relief Administration and the Public Works Administration, to determine the merit and competency of each project and the ability of the municipality or other political unit to employ competent technical direction for the execution of these projects.

The newly formed Advisory Council will continue the functions of this committee of three.

Along these same lines the Director of Public Works Administration of New Jersey, as well as his Assistant Directors have recognized the advisability of appointing registered engineers to positions of responsibility, and in many districts have accepted the services of a

delegate appointed by the local chapter as a personnel advisor in the selection of engineers.

The Association has initiated movements looking forward toward the employment of Engineers on projects financed by relief agencies, which would not trespass on the private practitioner and at the same time render service of definite value to the public. These have included surveys by the Coast and Geodatic Survey, riparian surveys and underground utility surveys. We are now actively engaged in an effort to obtain adequate compensation for municipal engineers engaged by municipalities on highway work financed in whole or in part by State funds.

Pleas have been made with encouraging results to the proper officials in Washington for priority for the northern half of New Jersey in the contemplated ten year mapping program to guard against possible water shortage which would result from the increased industrial activity that might be expected as soon as financial conditions again become normal.

From time to time the registration law of New Jersey has been amended to conform with additional requirements gained by experience. Such amendments were passed in 1923, 1926, 1927 and 1930. There are still several provisions of this act which we feel deserve serious consideration as to the desirability of their modification, and our legislative committee is now at work studying the question of legislation for the coming year to raise the standards of our registration requirements. Up until the present time the licensing board has recognized eighteen distinct classifications of the engineer. While this procedure has had its advantages in permitting applicants of varying degrees of engineering attainments to practice under the law, it undoubtedly has reacted unfavorably in our efforts to present to the public a unified organization founded on a broad base of fundamentals.

It should be the aim of the registration movement to offer to the public a qualified engineering profession, every individual of which should possess the education, training, professional experience and character common and necessary to all branches of engineering. An engineer should be recognized as such regardless of the specialty which circumstances have influenced him in following and only by such a condition can we expect recognition of the dignity and integrity which have always been so essential to the successful achievements of a profession.

There need be no limitations set up for specific fields of practice and individual qualification of an engineer, any more than they are set up by law for other professions. Danger of encroachment in a field for which the practitioner is not qualified may be left to the honor of the engineer and the personal interest and judgment of the client or employer. It is inconceivable that the fully qualified engineer will violate the principles of honorable practice any more than the lawyer or physician; and surely instances of such violations in these professions are remarkably few.

The next logical step in the improvement of the registration law should be one which recognizes the qualifications of engineers regardless of geographical location. By making the requirements for registration uniform in every state, we will accomplish full reciprocity and provide for the proper needs of a profession, which, above all others, should not be bound by State lines.

Our State Board has, for a number of years, been handicapped by the lack of sufficient funds to carry on its prescribed functions. This has been due principally to the provision of the act which requires that all surplus funds in the hands of the board at the end of each fiscal year shall be paid to the State Treasurer. It will be suggested to our legislative committee that consideration be given to a modification of this provision so that all income in the form of application fees and renewals be retained for the exclusive use of the Board. Finally, studies will be made to write into the law enforceable provisions which will restrict the designations of "Engineer" and "Land Surveyor" so that we may, with full confidence, prosecute all attempts at violation of the intent and purpose of the registration principle.

With the impetus which has been evidenced throughout the country in a little more than one half year since the active organization of the National Society of Professional Engineers, we may look forward with encouragement toward the prospects for the future of the Registered Engineer. There still lies before us an unlimited field for growth in spite of the rapid advance made within the past few months, which has brought the number of States adopting registration to thirty-five, embracing approximately ninety-three percent of the population of the country. Not until every State in the Union has written upon its statute books a licensing law, and every qualified engineer has been recognized, and every licensee has become affiliated with professional organization, will the ultimate goal and objectives of the movement be attainable. There must first be removed from the engineer's mind itself, any doubt as to the necessity for regulating and controlling the practice of engineering, and the advisability of forming a professional brotherhood based upon the highest ethical and technical standards. This task is much more difficult than that of obtaining favorable recognition of our purposes from the general public, but without its successful accomplishment we cannot hope to occupy the position in public life and render the service to our community which we should rightly assume. It is true that one of our objectives is to educate the public in the aims of our organization and in the availability of the Engineer as an agent in government, but let us not forget that we have a prior task to perform in educating the engineer himself along these lines.

Those of us who have been active in the effort to organize the Engineers in this movement are familiar with the resistance which has been offered by members of the profession against uniting for their mutual welfare. Much of this attitude is no doubt sincere, but based on misinformation or lack of foresight, and it devolves upon the leaders to conduct painstaking campaigns to clarify the purposes and benefits of the State and National Societies. The writer has recently received a communication from a most highly respected member of the profession, which will serve as an example of the problem which lies before us in soliciting the cooperation of Engineers toward their own advancement. This letter is a tender of resignation from the New Jersey Society by the Dean of one of our most prominent engineering schools; one who has been affiliated with our State movement since its inception, and whose resignation is rendered so much more serious by the influence which it might have on younger aspirants

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QUALIFYING ENGINEERS

Needs of Society Primary Consideration

Examining Boards Represent Public and Must Set Standards As Determined from Experience

By
INGENIEUR

DUE perhaps to the fact that Engineers have either by inclination or force of circumstances, refrained from distinguished participation in the administration of public affairs, there prevails, in the minds of many, a misconception concering the purpose of licensing or registration. The latter term sounds better but actually has less significance. Licensing suggests permissive authority, registration merely signifies enrollment, although most professional practice acts are in effect license laws despite the frequent use of the term registration by architects and engineers. Lawyers and doctors generally are licensed. Their registration is merely to provide a roster for public use.

The object of registration is not to create a class, confer a distinction, restrict individual opportunity, or deprive society of benefits of ability or genius. Its purpose is to protect life, health and property. It is primarily a measure of public safety. The State examines a man. It investigates his character and his knowledge. When it has done so it exercises the right to pronounce him either qualified or unqualified to protect the life, health and property of its citizens in practising a particular profession. In so doing it accepts a certain responsibility for the practice of the person and retains the right to revoke the certificate of qualification.

Under such conditions the state itself must make the most thorough investigation of all applicants. It cannot, except wherein the constitutional rights of an individual are jeopardized by depriving him of a right previously enjoyed without prejudice or calamity,—arbitrarily set up different standards for different persons. Of all the requirements exacted of a professional man, by far the most important is character. Of what avail is knowledge or training if possessed by one morally unfit. The greater the knowledge the greater the menace to society in the case of a dishonest person. There can be no question as to the necessity for a complete investigation of character in the case of all candidates.

The qualifying examination likewise demands a thorough investigation of the ability of the candidate to expound, and apply the principles and theories underlying the practice of the profession. In the light of certification it is the duty of the state to attest to this fact, not by the acceptance of diplomas, testimonials or other credentials but by a thorough uniform examination of every candidate. This is the only means of establishing a definite minimum plane of standard for admission to practice. The all important question is not where or how acquired, but does a man possess the knowledge necessary to begin the practice of engineering.

Unfortunately there is considerable agitation from certain quarters to exempt graduates of schools or other certified persons from an examination of technical knowledge. Such an attitude places the public welfare second to personnel interests. Why should any man be exempted from examination. If he has completed a systematic course that purports to cover the basic requirements why should he object to prove that he has actually acquired certain knowledge. He has a decided advantage over one who has not pursued a systematic course in a particular institution. The test of a man's ability is not in avoiding but in meeting competition and standards.

The standards should in the speaker's judgment be very high but not provincial. They should be premised upon the needs of society and should be determined from the experiences of practising engineers of proven ability. They should be elastic enough to meet ever changing conditions and new problems.

The Agency, which represents the state, should set standards. The Board of Examiners, should examine with a view to qualifying for practice. A review of tests or studies covered by curricula is not the purpose of an examination to qualify a person for professional practice. Schools should not seek to influence Examining Boards; rather should they plan their courses so as to train students to meet the requirements of the Boards which are public agencies. With the definite establishment of written examinations as a future requirement for the qualification of applicants who seek the right to practice professional engineering in this state the necessity for revamping the curricula of the various engineering schools becomes increasingly evident.

The undergraduate courses of instruction must in future be such as will enable the engineering graduate to pass his examinations for admission to practice and should be so developed as to offer a thorough training in the fundamentals and the sciences which underlie the general practice of engineering, rather than to suggest electively intensive instruction with a view to immediate specialization. This future requirement is as it should be. In law and medicine the specialization comes after admission to practice and the same procedure should apply to engineering.

Professional specialization predicates personal adaptability and judgment. The person yet in his teens is in no position to make a well justified choice until he has had an insight into the field, requirements and possibilities of the profession generally.

An analysis of the experiences of young men possessed of highly specialized training will undoubtedly

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ENGINEERS AND LEGISLATION

Report of National Society Committee

As Presented at Columbus, October 24, 1935

By
ARNOLD G. CHAPMAN

THIS somewhat abbreviated report is not intended to recite in detail the many and diversified legislative matters related to the practice of professional engineering which have been considered by the National Society of Professional Engineers and its Member State Societies or which have been before the various legislative bodies throughout the nation during the past year. Most of them have been described in the Society's monthly publication, The American Engineer.

It does seem proper however, to mention some of the accomplishments during the year of particular interest to the profession and present a few suggestions for the consideration of the membership.

The personnel of the Legislative Committee appointed by the President is:

Mr. Arnold G. Chapman, Chairman, 74 Chapel Street, Albany, N. Y.

Mr. C. J. Ullrich, 422 Ness Building, Salt Lake City, Utah.

Mr. R. E. Warden, 203 Union Station, Little Rock, Ark.

Mr. A. B. Carter, 632 Railway Exchange Building, Portland, Ore.

Mr. Pecos H. Calahan, 906 State Building, Los Angeles, Calif.

Mr. Harry E. Harris, 229 Thomas Street, Bridgeport, Connecticut.

Mr. Charles Gilman, 50 Church Street, New York City.

Mr. S. A. Keast, 4845 N. 18th Street, Philadelphia, Pa.

Mr. Samuel I. Sacks, 921 Widener Building, Philadelphia, Pa.

Mr. E. W. Lyon, 317 Professional Building, Fairmont, W. Va.

Mr. Henry L. Doten, 155 Sewase St., Augusta, Me.

Prof. L. S. LeTellier, The Citadel, Charleston, S. C.

Claude R. Erickson, Box 570, Lansing, Mich.

It can be readily appreciated that it has been impossible for all the committee to meet for discussion of the many questions which have arisen and/or which may arise in the nation and the respective states bearing upon the economic or technical status of the profession. Some little correspondence has been had with some of the committee members. The officers of the Society have cooperated with those in the different states who have had to do with legislation. The results demonstrate the accruing benefits of unified action and consideration and profiting by the experience of others.

The assistance of the National Society of Professional Engineers has been given in the enactment of registration laws during the past year in: Alabama, Connecticut, Maine, New Mexico, Oklahoma, Utah and Washington. This brings the total states having licensing laws to thirty-five (35).

Assistance has also been given in the formation of legislation or the outline of procedure and organizations furthering licensing in: Delaware, Georgia, Illinois, Kentucky, Maryland, Massachusetts, Missouri, Nebraska and Texas.

These are indicative of the interest in and the growth of appreciation of the principle of licensing. The time is not far distant when licensing will prevail in all states. This makes it the more important for a body such as this Society to endeavor to coordinate these movements in the individual states with the end in view there shall ultimately prevail similar, if not the same, requirements as a condition precedent to the practice of professional engineering.

This cannot be attained immediately but only after perhaps years of study and amendments due in a great measure to the necessity of making the engineer "Engineering Minded" and the public "Engineering Appreciative." Unfortunately, in the past too little attention has been given to legislative matters affecting the engineer. That more thought is being given is shown by amendments to registration or licensing laws made during the past year in several states such as:

California: Generally amended.

Indiana: Virtually a new law resulting from revisions.

New York: Removal of the exemptions in matters related to corporation practice which has been one of the principal means of subterfuge for evasion of the intent of the engineers registration law as well as that of the architects.

West Virginia: Revised generally.

It is not alone legislation specifically amending or referring to the Engineering Practice Acts with which the Member State Societies and the National Society should and must concern themselves. There is much, and equally important, other legislation which should be carefully scrutinized in each state and in the national legislation to see that through some innocent provision incorporated in measures, engineers shall not be precluded from the usual or customary practice or the development and expansion of their field along the lines properly within its sphere. Some of these measures which have been opposed if enacted as originally presented, would have been detrimental both to the engineer and the public, and would not have given the

assurance that the qualified would direct those things strictly within the realm of engineering and its related fields.

Examples of this kind are the attempted legislation in Pennsylvania to debar engineers from the preparation of building plans and restrict that field to the sister profession, and in New York to limit appearances and the presentation of certain data and the interests of a client before state departments, to members of the legal profession. These measures failed of enactment due to the activities of the National and Member State Societies. Had there been no such organizations the opposition would have been confined to only a few individuals. Other examples of the necessity of concerted and unified action by a representative body of engineers are measures introduced in Congress such as:

Senate Bill 2665 to create a Department of Public Works to be headed by a professional engineer with cabinet portfolio.

Senate Bill 2994 which, if enacted, would have subordinated the professional engineer and debarred him from appearances for clients, before certain federal agencies, boards and departments. This was opposed.

Effective opposition in several instances has been registered against the indiscriminate use of the term "engineer" in pending legislation when its use did not comprehend the services of a professional engineer.

Registration is a recognized institution. Upon proper laws depend its effectiveness making it essential that mature thought be given to the provisions of proposed legislation. Registration and its attendant legislation have two important objectives:

First: Protection of the public by requiring definite qualifications measured by minimum standards as a condition precedent to practice the profession and to preclude the unqualified from attempting to offer to practice.

Second: The protection and elevation of the profession to insure recognition and the respect to which it is entitled. Obviously the second cannot be accomplished without some basis or standard which is dependent upon the first.

These objectives should be constantly in mind and the public at large made appreciative of the fact that there is a strong possibility of its having less recourse to two sister professions, Law and Medicine, if they will insist that the laws require that only those, who have qualified, after education and experience, before duly constituted boards, be allowed to design and direct those things so vital to their well being, such as water supply, sanitation, transportation and building construction in cooperation with the sister profession of architecture.

Cooperation must be given to those vested with the duty of passing upon the qualifications of applicants to the end that the standards shall not be lowered but rather raised, and that they be placed above the possibility of interference or embarrassment from outside interests.

It is expected that prior to the first of the year a review will have been made of all the existing licensing laws with the idea of offering assistance and suggestions in the respective states to strengthen the statutes.

It is equally important that in each state local consideration should be given to laws related to the field of engineering with the idea in mind of protecting the public by having performance only by the duly qualified. Throughout the country today there are many positions which by the nature of the duties should be occupied by engineers but which are not. Such latitude will not be found to prevail where medical or legal considerations are involved.

Cooperation must be had from all, membership should not be too critical, and all members of the profession owe an obligation to themselves and to the public and particularly to their profession in giving some little attention to the legislative measures affecting the engineer. To carry on as it should, the profession obviously will require an efficient organization. It is desirable that ultimately this be carried on by men who are not bound by other ties in order to avoid embarrassment in their practice. Men occupying public positions necessarily may feel reluctant to press certain measures. Men in private practice likewise are reluctant to press certain measures. It is, therefore, essential that the Society should, as soon as possible, have a trained and efficient organization. In order to function to best advantage, all legislation, as well as other matters, should clear through a central office for the purpose of coordination insofar as possible on the basic principles.

The potential field of activity for the legislative committee is far reaching. It is confidently believed that with the greater unanimity of the members of the profession and with the cooperation of all the ensuing year must witness marked advances in legislation to:

Maintain the solidarity of the engineering profession.

Strengthen registration laws.

Curtail the indiscriminate use of the term "engineer."

Leave no uncertainty as to that which is embraced in the "practice" of professional engineering with the consequent legal appreciation.

Clarify existing statutes so to leave no doubt that certain functions are those of the engineer.

Bring about a cooperative spirit among all the learned professions in according recognition to the respective professions.

In conclusion, I wish to make due acknowledgment to the officers of the Society through and by whom a great part of legislative work has been conducted, and to the members of the committee who have stood ready to render service, without stint.

> Legislation is the concern of every citizen: this includes the engineer.—*A. G. Chapman*

ITEMS OF GENERAL INTEREST

NEWS, REPORTS, COMMENTS

NATIONAL SOCIETY ACTIVITIES

Correspondents and readers are invited to submit for publication items of interest to the professional engineer of the country. Such material should be forwarded as quickly as possible in order to keep news up to date.

CIVIL OR PROFESSIONAL ENGINEER

A Sound Proposal That Comes Late

On a number of occasions during the past five years, the American Engineer has pointed out that all engineering is either military or civil, and that mechanical, electrical, chemical, etc., are merely branches thereof.

The appended letter merits the attention of engineers generally. Its recommendations are sound but the trend of schools and organizations have too long been in the wrong direction to readily accomplish the suggestion offered. The Provincial and somewhat selfish attitude of certain engineering societies and institutions of learning, which is manifest in their position on the question of registration and the examinations, in connection therewith, would undoubtedly present a difficult problem.

"October 28th, 1935

Mr. Arthur V. Sheridan, Editor,
The American Engineer,
2952 Grand Central Terminal,
New York, N. Y.
Dear Sir:

In the October issue of The American Engineer there appeared an article, by the Editor, entitled "Engineering One or Many Professions."

I do not recall when I have enjoyed reading anything in the magazine as much as I did that article. I suppose. because it is along the lines that I have been thinking and talking for a long time.

It seems to me, that all of the members of the Engineering profession, whether they specialize in Bridges, Buildings, Sanitation, Chemistry, Electrical, Mechanical or some one of the many branches of Engineering, would be well advised to concentrate on the professional designation of Civil Engineer.

This is a designation that is blessed with the usage of years, is dignified and does not lend itself to any misuse or misinterpretation.

It seems to me also, that the Engineer should as rapidly as is possible, try to do away with the term Professional Engineer. In my opinion, this term is misunderstood by the layman and is a term below the dignity of the Civil Engineering profession. Could it not be arranged for the licenses to be issued to "practice Civil Engineering?"

Probably some beginning should be made with the Universities and Technical Schools where they have made a practice of "specializing" in the last two of the four year course. Would it not be

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A PRESS ITEM

Worth Preserving

The Washington *Evening Star* of October 9th publishes the following pertinent item, which should be brought to the attention of the public in every State:

U. S. ENGINEERS AID FALTERING W. P. A.

Employment goal far short of realization, President Calls in Army Corps.

By NELSON M. SHEPARD

With the Works Progress Administration getting deeper into the hole as the November 1 deadline for employing 3,150,000 jobless persons approaches, President Roosevelt has ordered the resources of the Corps of Army Engineers placed at the disposal of Harry L. Hopkins to facilitate the lagging program.

This became known today when it was learned that Maj. Gen. Edgar Markham, chief of Army Engineers, has been designated as engineering consultant to the W. P. A.

The President's order, which has not yet been announced by Hopkins' office, repeats the history of the old C. W. A. program, when it was necessary to call in the Army engineers to pull Hopkins out of a tight hole.

State Heads Get Order

The full purport of the order was revealed in instructions issued by Hopkins to bewildered State administrators, many of whom have repeatedly called for aid in straightening out confusing engineering projects under their jurisdiction.

Hopkins' office last week announced that Lieut. Col. F. C. Harrington of the Army had been appointed chief engineer of the section. This was supposed to have been merely a routine appointment. It was denied by W. P. A. officials that any other Army engineers would be called in.

Hopkins' order to State administrators announces that 11 consulting field engineers have been appointed to take charge of problems in the various States.

When the works progress administrator revealed the difficulties confronting his program to the President, with whom he is traveling, Mr. Roosevelt immediately directed the full resources of Army Engineers to be made available for whatever services might be required.

To Visit Areas Soon

The consulting Field Engineers, Hopkins advised administrators, will shortly visit areas to which they are assigned. State administrators were directed to "afford them every facility for securing full information concerning the works program in each state with particular regard for those obstacles or difficulties which are hampering the program."

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ENGINEERS PLEASE NOTE

President of American Bar Association Predicts Legislation Advocated by N. S. P. E.!

The New York Times of October 24th, carried the following very pertinent and interesting account of a recent address issued by the President of the American Bar Association:

"AN INTEGRATED BAR FORECAST IN NATION"

Ransom, Head of American Bar Association, Says Lawyers Will Be Forced to Join

MOVEMENT HELD GAINING

Speaker at Meeting Here of I.C.C. Practitioners Finds Rise in Public Service

William L. Ransom, president of the American Bar Association, forecast in a speech here yesterday, that all lawyers would be compelled eventually by the Legislature or the ruling court in each State, to become members of their State bar association, "whether they liked it or not."

Such "integrated bars" already exist in seventeen States, Mr. Ransom said, addressing the annual meeting of the Association of Practitioners before the Interstate Commerce Commission, some of whom are lawyers.

"I should like to urge," he said, "no matter how much you are engrossed in your own narrow field, that you give some thought and some attention to the problems of the legal profession in this country as a whole.

"As president of the American Bar Association I have had occasion to observe the change taking place in the organization, control, discipline and standing of the legal profession. A movement for integration of the bar, of which we get no vision from the tall buildings in New York City, is going rapidly ahead. I welcome it.

"Seventeen States now have what is called an 'integrated bar.' By decree of the court controlling the bar in those States, or by legislative action, every lawyer, whether he wants to or not, must be a member of the organized bar of that State, amenable to its discipline and subject to the consensus of opinion of the organized legal profession ascertainable through such organizations.

"All the States on the Pacific slope have integrated bars. The California Bar Association has 13,000 members, twice as many as the Bar Association of the State of New York. In California the twelve lawyers who are chosen as directors of the integrated Bar Association, one from each judicial district, are sworn in with the Public Officers Oath by the Chief Justice of California.

"Missouri has an integrated bar. So has Kentucky, where the court in Louisville recently went through the list of

(*Continued on page* 23)

STATE ACTIVITIES REPORTED

Leglislation and National Convention News

The American Engineer acknowledges the contributions of correspondents and intends, as soon as the organization of its editorial staff is completed, to make proper announcements.

Correspondents are urged to forward news items in time for the same to reach the Editor before the twentieth of each month.

DISTRICT OF COLUMBIA

New Society Has Record Attendance At Second Meeting

From Secretary W. S. Conlon, of the National Society, comes the following news item:

"The second meeting of the District of Columbia Society of Professional Engineers held at the Mayflower Hotel, October 17th, 1935, was a success beyond expectations. There were 365 engineers in attendance. Speakers were the Honorable Charles O. West, Under Secretary, Department of Interior; Engineer W. E. Reynolds, Assistant Director of Procurement, Treasury Department; Engineer D. B. Steinman, President of the National Society of Professional Engineers. The guests were, Rear Admiral Norman M. Smith, U.S.N., Chief of the Bureau of Yards and Docks; Commissioner Elwood Mead, Bureau of Reclamation; Commander Carl H. Cotter, U.S.N., representing Mr. Frank C. Walker, Director of the National Emergency Council; Mr. A. R. Clas, Director of Federal Housing; Mr. W. F. Person, Director U. S. Employment Service, U. S. Department of Labor; Engineer Hugh A. Kelly, Vice-President of the National Society of Professional Engineers; Engr. Donal L. Chamberlin, President of the American Association of Engineers was represented by the President of the local Chapter of that organization; Engr. T. H. Urdahl; Captain J. C. Gholster, Director of Engineering, P. W. A.; Engr. Perry A. Fellows. Assistant Chief Engineer, W. P. A.; Commander G. A. Duncan, U. S. N.; Engr. J. A. Bugler, Assistant Director of Engineering, P. W. A.; Engr. J. L. Nagle, representing Mr. A. B. Crammer, Director National Park Service; Mr. Ward Buckles, Director of Finance, Department of Agriculture, representing Secretary Wallace; Engr. W. S. Conlon, Treasurer and Acting Secretary of the National Society of Professional Engrs. The Procurement Division of the Treasury Department was well represented. Engr. W. N. Rehlaender, Administrative Assistant; Engr. N. A. Melick, Supervising Engineer; Engr. N. S. Thompson, Superintendent of the Mechanical Engineering Section; Engr. J. W. Guider, Superintendent of the Architectural Engineering Division; Mr. J. H. Schafer, Office Manager; and many others. This was a meeting of which the officers of the District of Columbia Society of Professional Engineers may justly be proud."

The announcement, which preceded the meeting, was as follows:

District of Columbia Society of Professional Engineers, 1033 National Press Building, Washington, D. C.

(*Continued on page* 20)

NEW JERSEY

Contemplates Legislation

President Morris Goodkind of the State Society has forwarded advices to the Chairman of the Legislative Committee urging him to take steps to correct the unfair discrimination resulting from the recent amendment to the Architects' Practice Act.

Excerpts from a communication addressed by President Goodkind, together with official announcements, are herewith produced:

"I must confess that I had no knowledge of the fact that the architects of this State were successful in obtaining passage of Chapter 117, Laws of 1934, which practically prohibits registered engineers of this State from filing plans for buildings. As I remember it, a committee was appointed in 1934 by the professional engineers of this State to work out a satisfactory solution of this problem with the architects, and it was my impression that nothing further was to be done with this amendment until further consideration was given by this joint committee. I also recall that at that time you were favorably disposed to the contention of the structural engineer.

We now have an Architects and Engineers Advisory Council of which you are a member, and it should be one of the first considerations of this Council to correct the unfair and unjustifiable conditions of the Architects' Act. To permit this condition to exist, without the most strenuous objections on the part of the engineer, would be, in my opinion, a serious indictment against the organization of professional engineers.

I am sending a copy of this letter to Mr. Victor Gelineau, Chairman of our Legislative Committee, and trust that between the Advisory Council and the Legislative Committee action may be taken during the coming legislative session to correct this damaging condition."

New Jersey State Board of Architects
Gilbert C. Higby, Secretary-Treasurer
Office of the Board, 32 Walnut Street, Newark, New Jersey

October 7, 1935

"To the Building Inspectors of all Municipalities within the State of New Jersey.

Dear Sir:

Enclosed you will find copy of an Act governing the practice of Architecture in the State of New Jersey, opinions of Attorney Generals Stevens and Wilentz, and a List of the Registered Architects entitled to practice the profession of Architecture in this State for the year ending June 30, 1936.

(*Continued on page* 20)

NEW YORK

Western New York

At Jamestown, New York, on September 28th, 1935, there was held the Third Annual Joint Meeting of the Chapters of Chautauqua-Cattaraugus, Erie, Genesee, Monroe, Niagara and Steuben Area Counties. Engineer Stewart S. Neff, President of the Erie County Chapter, presided.

Engineer D. B. Steinman, President of the National Society of Professional Engineers, and Engineer John C. Riedel, President of the New York State Society of Professional Engineers delivered stirring accounts of the rapid growth of the society throughout the country.

The six participating chapters were instructed to each appoint a member to serve on a committee to prepare a schedule of salaries and fees for professional services in the district.

A message was sent to Engineer Michael W. Wipfler, President of the Steuben Area Chapter, and City Engineer of Elmira, congratulating him upon his recovery from almost fatal injuries received five months previously.

The enthusiasm of those present was aroused to such an extent that consideration is being given to the advisability of making the joint-meeting a semi-annual, instead of an annual function.

ALBANY COUNTY

Professional engineers of New York State may now borrow books from the New York State Library. Recent representations from the Albany County Chapter have secured a revision of the lending rules of the Library under which this privilege has been extended to engineers on the basis of their registration with the State Education Department.

The 1935 Year Book of the Chapter is a model of attractiveness and completeness.

STEUBEN AREA

Close to one hundred engineers, at the October meeting of the Steuben Area Chapter, were addressed by Captain Lester F. Rhodes, Army engineer, on the subject of "Flood Control in Southern New York and Northern Pennsylvania."

Guests of the Chapter were: Hon. Leon F. Wheatly, Mayor of Hornell; Hon. Alfred G. Hood, Mayor of Corning; Mr. W. G. Kellogg of Greenwood, County Highway Superintendent; Prof. F. A. Barnes, president of the Ithaca Chapter of the American Society of Civil Engineers; Mr. Charles Macker, president of the New York Society of Highway Engineers.

Dr. George V. McCauley, Physicist of the Corning Glass Works, will discuss the "Engineering Problems Connected with the Casting of a 200-inch Telescope Lens" at the November meeting of the Chapter.

(*Continued on page* 21)

DISTRICT OF COLUMBIA

(*Continued from page* 19)

Announcement — All engineers are cordially invited to attend a meeting to be held at the Mayflower Hotel, Thursday, October 17, 1935, at 8 p. m. Program: Master of Ceremonies, Col. Burton Brown of Kansas. Economics and the Engineer, by Honorable Charles O. West, Under Secretary Department of the Interior. Public Works, by Engineer W. E. Reynolds, Assistant Director, Procurement Division, Treasury Department. Engineers and their Professional Society, by Engineer D. B. Steinman, Consulting Engineer, N. Y., President, National Society of Professional Engineers.

An informal dinner will be served at 6:30 p. m. For reservations call District 6951 or write to the Secretary, Room 1033, National Press Building, Washington, D. C.—Engineer S. W. Moulding, Sr., Secretary.

Congratulations are in order to those who brought about this splendid affair.

NEW JERSEY

(*Continued from page* 19)

You will note Chapter 56 of the Laws of 1917 which is known as the Building Department Act states that any department of the State of New Jersey or Municipality within this State created for the purpose of filing of plans and specifications for buildings under the several acts shall not receive or file any plans or specifications unless the same bears the seal of a licensed Architect of the State of New Jersey or in lieu thereof an affidavit sworn to by the person who drew the same. As interpreted by the Attorney General's office, this means that if a licensed Architect of the State of New Jersey does not have his seal upon the plans submitted to the Building Department, he must make a sworn affidavit that he did prepare the same.

That part of the Building Department Act which states, quote "but in lieu thereof an affidavit sworn to by the person who drew or prepared the same" should be carefully interpreted to be consistent with the new Act, Sections 13 and 14 wherein it states "or any person aiding or assisting such person not having a certificate to practice Architecture shall be liable to a penalty of not less than fifty dollars, etc."

Further under Section 14 of the new Act as of May 2, 1934, you will note the law does not prohibit any person in this State from acting as designer of any building that is to be constructed by himself *for his own use,* which is interpreted to mean that an Owner may design, build and occupy the premises personally for his own use and should not be interpreted any other way, and further in accordance with Chapter 56 of the Laws of 1917, the Owner will have to make a sworn affidavit that he did prepare the plans for his own personal use.

It is the opinion of the Attorney General's office that the Building Inspectors are justified in refusing to accept plans for filing purposes from those not qualified under the present law. Further, the Building Departments should refuse to accept plans filed by all corporations. Corporations are not permitted in this State to practice Architecture. The only right to practice is with an individual practitioner, such as a person, not persons.

Contractors, material men, and others not registered to practice the profession of Architecture in the State of New Jersey are not permitted to prepare preliminary data, plans or specifications in this State for other persons.

It is the Board's desire to assist all Building Inspectors in the enforcement of the law and I sincerely hope the above explanations are sufficient to guide you in the proper administration of your office.

Very truly yours,

(Signed) Gilbert C. Higby

Secretary and Treasurer, N. J. State Board of Architects."

NEW JERSEY STATE BOARD OF ARCHITECTS

Opinions of Attorney Generals Wilentz and Stevens

Dec. 13, 1934

"Chapter 56 of the Laws of 1917 relates to the filing of plans and specifications in the building departments of the various municipalities throughout the State. This Act provides that any department in the State or any municipality therein authorized to receive and file plans and specifications shall not accept such plans or specifications unless the same bears the seal of a licensed Architect of this State or in lieu thereof an affidavit sworn by the person who prepared the same.

Section 13 of the Architects' Act, as amended by Chapter 117 of the Laws of 1934 prohibits any person from preparing plans, specifications and preliminary data for the erection or alteration of any buildings. This section excepts buildings designed by licensed professional engineers which are incidental or supplemental to engineering projects. When the Architects' Act was amended by Chapter 117 of the Laws of 1934, the Legislature was presumed to have knowledge of all existing statutes relating to the practice of Architecture including the above mentioned law that provides for the filing of plans with the building departments of the various municipalities of this State.

Sept. 27, 1934

"Where an engineer or other person employed by a corporation prepares plans and specifications for the erection of a building he must be licensed to practice Architecture, even though the building is to be solely occupied and used by the corporation causing the erection of the building. If the employee of the corporation is not licensed, a violation of the law takes place.

In my opinion, Section 14 cannot be so construed as to permit the preparation of plans and specifications by corporations, while at the same time the person actually performing the work is violating the law."

By: Attorney General Wilentz.

Sept. 18, 1931

"Departments created by a municipality where plans are to be filed are prohibited from receiving them if they do not bear the imprint of the seal of a licensed Architect or in lieu of such seal, by his affidavit.

A corporation, of course, may not pursue the practice of Architecture, that right being limited to natural persons. If the plans and specifications prepared by an Architect bear the imprint of his seal, or, in lieu thereof, his affidavit that he prepared the same, the building inspector of the municipality or department in which the plans and specifications are to be filed, in my judgment, is in duty bound to file them.

As I have indicated, a body corporate cannot pursue the practice of Architecture, and under the statute, having no right to seal plans and specifications, it may not, in lieu thereof, file the affidavit permitted by Chapter 56 of the Laws of 1917."

By: Attorney General Stevens.

ESSEX COUNTY HOLDS FIRST FALL MEETING

From Creighton D. Bickley, Chairman of the Publicity Committee of the Essex County Chapter comes the following:

"The first meeting of the season of the Essex County Chapter of the New Jersey Association of Professional Engineers and Land Surveyors, Inc., held at Hotel Douglas in Newark, presented another in its program of speakers who represent other professional groups having Licensing Boards.

Walter F. Barry, D.D.S., a member of the New Jersey Board of Dental Examiners and a Past President of the New Jersey Dental Association addressed the meeting. He told of the inception of the State Law creating the New Jersey Board of Dental Examiners and the difficulties encountered in having the original law passed by the House and Senate in a form desirable to his profession. It is interesting to note that, as passed, the Governor *must* appoint members to the New Jersey Board of Dental Examiners from a group of names submitted to him by the New Jersey Dental Society. This requirement assures the selection of members of the Board agreeable to the organized Dental Profession. The New Jersey Association of Professional Engineers and Land Surveyors, Inc., which does not possess this authority, appreciates the value of such a privilege.

Dr. Barry further told of overcoming the opposition to the passage of certain amendments held highly desirable to the basic law. Of this action he would give no further details than to say that the New Jersey Dental Society maintained "sort of a lobby." To aid in enforcing the Law and the Code of Ethics, a paid investigator is maintained. So effective is the work of the State Board and the Society in behalf of the profession that $3,000 was raised in three days for a specific purpose.

The New Jersey Association of Professional Engineers and Land Surveyors might well emulate this example. Other groups of engineers would profit from a talk by Dr. Barry on the methods used by the Dental Profession for the maintainance and advancement of its welfare.

A business meeting followed. Reports developed that the Membership Committee had done such efficient work that the Chairman, Mr. Mattee, was voted reimbursement for his purchase of copies of the American Engineer for distribution to prospective members. This pub-

lication has proven an effective means of presenting the activities of our State Association and National Society.

President S. C. Hamilton announced that at the request of Commissioner Minisi, Director of Parks and Public Property of the City of Newark, the name of J. Ralph Van Duyne had been recommended on behalf of the Chapter as a member of a Committee of Engineers and Architects to study the improvement of the area in the vicinity of the Pennsylvania Railroad Station. The members of the association appreciate exceedingly the confidence shown by the Commissioner in turning to them for this recommendation and are sure his appointment of J. Ralph Van Duyne will place at his disposal the particular type of ability most suited to the needs of the task. It is hoped that other public officials may follow this example and request men who are preeminently qualified for public service.

The announcement of the attendance at the November 14th meeting of Dr. David B. Steinman, President of the National Society of Professional Engineers, was greeted with an ovation."

UNION COUNTY

Asks Adjustment of W.P.A. Scales

The Secretary of the Union County Chapter has advised Secretary Weeks of the State Society as follows:

"Professor Phillip Kissam, State Director of N. J. Local Control Survey, spoke on "The Application of the Legal System of New Jersey Plane Coordinates before 50 members of the Union County Chapter, N. J. Association of Professional Engineers and Land Surveyors, at a meeting held on the evening of Oct. 8 in the Eleanor Restaurant, 1165 East Jersey Street, Elizabeth, N. J.

Three resolutions were passed by the organization. One of these resolutions, introduced by Engr. J. L. Bauer of Elizabeth, was to the effect that the State Administrative Council be requested to place at headquarters an engineer who shall be equipped with power to pass on the eligibility of engineers and engineering assistants for work relief. Also included was a suggestion that employment on W.P.A. projects be available to engineers who need help but are too proud to apply for relief. Education and training of the engineer was said to class him above the ordinary laborer for examinations as to eligibility for relief.

A second resolution presented by Engr. Bauer listed objections to variation in wages for engineers and engineering assistants as set up for W.P.A. projects in New York and New Jersey. It was felt that the engineer should receive a decent living wage and that there should be less difference in wages in various sections, in view of the fact that "living costs are uniformly high," as was stated in the resolution. The chapter asked readjustment of wage scales, so as to make the same more in accordance with the class of work done, the education necessary and the prevailing wage scales for sub-ordinate labor.

Prof. Kissam offered a resolution urging immediate approval by the U. S. Government of a joint national mapping program recently devised, and also asking that appropriations be made available to carry on this work. This project calls for the complete accurate mapping of the country within the next ten years, and has been presented for the consideration of the nation by the National Board of Surveys and Maps. The plan, it is believed, will be a boon to commerce on land, water and air and is absolutely necessary for adequate defense in time of war.

Engr. Arthur S. Hobby, of Elizabeth, speaking on wage scales for engineers, said that the latter would benefit greatly if the State Association had a representative at Washington."

PASSAIC COUNTY

Plans for Season

A program carrying through June, 1936, has been released by the Passaic Chapter:

KEEP THESE DATES IN MIND

October 24th, 1935, The Application of the Legal N. J. System of Plane Coordinates, by Prof. Phillip Kissam.

November 21st, 1935, Moving Pictures and Lecture on Boulder Dam, by Babcock and Wilcox Company.

December 19th, 1935, Pictures and Lecture on the Work of Port of N. Y. Authority, by Port of N. Y. Authority.

January 23rd, 1936, Ladies Night.

February 27th, 1936, Talk by Mr. J. C. Wegner.

March 26th, 1936, Talk by Mr. James White of the Butler Argus.

April 23rd, 1936, Annual Dinner, principal speaker Congressman Hart, Hudson County.

May 21st, 1936, Travelogue Through South America, by Pan-American Aviation Corp.

June 25th, 1936, Annual Outing—Golf, Tennis and Wiener Roast.

NEW YORK

(*Continued from page* 19)

An endeavor to organize the professional engineers of Tompkins County is being sponsored by the Chapter.

WESTCHESTER COUNTY

At the October meeting of the Westchester County Chapter Senator Thomas C. Desmond delivered an address on "The Engineer in Politics." Hon. Jane Todd, Hon. Ralph Gamble, and Hon. Herbert Smith, members of the Assembly of the State of New York, were guests of the Chapter at the meeting.

Mr. Arthur Jovis, member of the Chapter Public Speaking Committee discussed, during the five-minute period allotted to him "The Function of the Engineer in the Appraisal of Fire Insurance Losses."

An all-star talking picture "Highway Patrol" featuring Harry Langdon, was exhibited under the auspices of the United States Safety Association and the Police Chiefs' Association, through the courtesy of The Westchester Rubber Company, at the November meeting of the Chapter. The film depicted the tragic and sometimes humorous situations resulting from traffic violations. A second talking picture, describing the engineering services performed in the manufacture and testing of automobile tires, was shown with the cooperation of the B. F. Goodrich Company.

Mr. Joseph Barnett, former director of the Chapter, is energetically engaged in the activities of the District of Columbia Society of Professional Engineers.

QUEENS COUNTY

A large number of prospective members at the October meeting of the Queens County Chapter heard a splendid address by Engineer John C. Riedel, President of the New York State Society, on the aims and accomplishments of the national, state and county organizations.

BRONX COUNTY

Reports on the "Delaware River as a source of water supply for New York City" and "New York City's Proposed Electric Lighting Plant" were approved by the Chapter at the November meeting.

PENNSYLVANIA

Meeting in Philadelphia

From the pen of A. C. Fisher, Chairman of Publicity for the Pennsylvania Society comes the following:

A regular meeting of the Philadelphia Chapter of Professional Engineers was held in the Engineers' Club on November 7th, 1935.

Engineer S. I. Sacks the Chairman, called upon Engineer Thomas Battin for the report of the first annual convention of the National Society details of which appear elsewhere in this magazine.

Engineer R. C. Scott, Chairman of the membership committee commented on the work and efforts of Engineer J. Edgar Hires in the formation of new chapters and increased membership. The resume for the year showed that on January 1st, 1935 there was one Chapter (Philadelphia) and ninety-eight members were in the State Society. At present this has been increased by the establishment of the following chapters:

Pittsburgh, Wilkesbarre, Harrisburg, and Allentown.

The total membership to date is two hundred and thirty-five in the above mentioned Chapters.

A new chapter in Reading is in the process of formation and others are to follow.

The Philadelphia Chapter has been instrumental in having the Bell Telephone Company agree to a new listing in its directory for "Professional Engineers" wherein only those registered under the state act are permitted to be listed under that heading.

The guest speaker of the evening, Mr. M. I. Kast, Secretary of the State Board of Examiners of Architects, presented a paper on the relationship and cooperation of the registered Architect and the Professional Engineer. An open discussion followed in which Engineer Meyers of the State Registration Board for Professional Engineers succeeded in clarifying some doubtful statements.

Attention was again called to the unlawful practice of engineering by unregistered men. This condition can only be remedied by the reporting of such violations to the local Chapter who will pro-

ceed to take action with the cooperation of the State Registration Board of Professional Engineers.

A resolution was passed protesting to the Governor of Pennsylvania, the indiscriminate dismissal of competent professional engineers from their positions.

The Society is fortunate enough to have secured as a speaker for its next meeting on December 5, 1935, Engineer Willard S. Conlon, the National Secretary.

REGISTRATIONS GRANTED

As a result of a recommendation by the State Board of Examiners, the following have been admitted to the practice of professional engineering in Pennsylvania as of September 19th-20th, 1935:

Bartlett, Max C., 615 Dixie Terminal Bldg., Cincinnati, Ohio; Beach, Robin, 99 Livingstone St., Brooklyn, N. Y.; Boyd, Norman, 45 Chestnut Street, Lebanon, Pa.; Bradley, Wm. T., 4801 Locust St., Philadelphia, Pa.; Crumlish, Hugh J., Pleasant Gap, Centre Co., Pa.; Dambly, A. Ernest, 901 Architects' Bldg., Philadelphia, Pa.; Endsley, Louis E., 524 Fourth Ave., Pittsburgh, Pa.; Erickson, Roy J. A., 620 Packard Bldg., Philadelphia, Pa.; Ermold, M. Atlee, 907 Station Ave., Haddon Heights, N. J.; Fletcher, Raymond F., 6541 Belmar Terrace, Philadelphia, Pa.; Gunby, Frank M., 201 Devonshire St., Boston Mass.; Hopkins, John W., R.F.D. No. 5, Franklin, Venango Co., Pa.; Laudig, James J., Cedar Ave., Scranton, Pa.; Leonard, William, 620 Packard Bldg., Philadelphia, Pa.; Lex, Clayton Githens, 620 Packard Bldg., Philadelphia, Pa.; Lynch, Bernard A., Penn Central Light & Power Co., Altoona, Pa.; Mabrey, N. L., Box No. 1, Milton, Pa.; Marsell, Philip A., 320 Beaver Road, Emsworth, Allegheny Co., Pa.; McPherson, K. W., 435 Sixth Ave., Pittsburgh, Pa.; Milsom, John W., 116 Fifth St., Phillipsburg, Centre Co., Pa.; Moody, L. E. 1520 Locust St., Philadelphia, Pa.; Nussbaumer, Newell Louis, 327 Franklin St., Buffalo, N. Y.; Powell, George W. Jr., 458 S. Fourth St., Darby, Delaware Co., Pa.; Reid, Allen Willard, 412 Washington St., Reading, Pa.; Rowe, Robert Rich, 619 West Chicago Ave., Chicago, Ill.; Sigmund, Paul E., 620 Packard Bldg., Philadelphia, Pa.; Stewart, Frederick C., Mech. Engr'g Laboratory, State College, Pa.; Timmis, Pierce, 1401 Arch St., Philadelphia, Pa.; Van Loon, F. W., 437 Chestnut St., Philadelphia, Pa.; Weston, James William, 20 Old Tork Road, Willow Grove, Montgomery Co., Pa.; White. John C., 16 Branford Road, Hastings-on-Hudson, N. Y.; Pearce, M. J., Third and Bern Sts., Reading, Pa.

OHIO

Society Invites Membership

The following bulletin has been issued by the Ohio Society of Professional Engineers:

"Fellow Engineers and To Be Engineers:

Prior to March 26, 1935, more than 7,500 applicants for registration as professional engineers filed with the Engineers' Registration Board, and to date only about one-third of these have had final determination by the Board. It is gratifying to know that the Board is digging in and disposing of about 100 applications per week.

Whether or not you have received your certificate of qualification to practice your profession, you are interested in the welfare efforts of the Ohio Society of Professional Engineers and the National Society of Professional Engineers, and every one of these 7,500 applicants should affiliate with one or both of these Societies.

We want you to know that special efforts are being put forth to build up an 100% engineering organization, and that

(1) $4.00 covers membership in the Ohio Society of Professional Engineers one full year from date of remittance.

(2) $1.00 additional covers annual subscription to "American Engineer."

(3) $7.00 (total) covers both (1) and (2) and includes membership in the National Society of Profesional Engineers until January 1, 1937.

Make your choice, and let us have your early and substantial cooperation.

Application for Membership

The undersigned hereby makes application for membership in the Ohio Society of Professional Engineers and the National Society of Professional Engineers under option ..... as outlined above, and herewith incloses remittance in the sum of $.....

The undersigned applicant for membership has applied for registration as a professional engineer with the State Board of Registration for Professional Engineers and Surveyors and has .....been granted certificate of qualification to practice professional engineering in Ohio. Registration No. is .....

Dated ..... Name.....

P. O. Address.....

Title .....

Refers to .....

and .....

Very truly yours,

Wade W. Shidler, Pres.,
John Laylin, Secretary."

RHODE ISLAND

Again Studies Registration

During the past few months considerable interest in the enactment of a Registration Act has been manifested by engineers of Rhode Island.

The Providence Engineering Society has indicated its intention of sponsoring a measure at the next session of the legislature. President Steinman has tendered the services of the National Society of Professional Engineers.

CONNECTICUT

Issues Official Bulletins

The newly created State Board of Registration has recently issued the following bulletins, which should be carefully read by all Connecticut engineers:

October 10, 1935

To the Engineers of Connecticut:

The Connecticut Board for Registration of Professional Engineers and Land Surveyors announces that it is ready to receive requests for Application Blanks, which may be addressed to it through the Secretary at Cheshire.

The act creating the Board was passed by the last Legislature in response to the request of the engineering organizations of the State and was approved by His Excellency Governor Wilbur L. Cross on June 13, 1935. He then appointed as members Edwin J. Beugler, Joseph W. Cone, Charles R. Hoover, Charles F. Scott and William K. Simpson. The first meeting was held in the Governor's office at Hartford. Charles F. Scott was elected Chairman and Edwin J. Beugler, Secretary.

Thirty-four states now have registration laws, Connecticut being one of five to pass its law in 1935. The Connecticut law provides that: "No person shall practice or offer to practice the profession of engineering in any of its branches, including land surveying, or use any title or description tending to convey the impression that he is a professional engineer or land surveyor unless he shall have been duly registered or exempted under the provisions of this act." The Board, with approval of the Attorney General, has fixed January 1, 1936, as the date the Act becomes effective.

The Board has adopted the following definitions:

The term "Professional Engineer" shall mean a person who, by reason of his knowledge of mathematics, the physical sciences and the principles of engineering acquired by education and/or experience is qualified to engage in engineering practice as hereinafter defined.

The practice of Professional Engineering includes any professional service such as consultation, investigation, evaluation, planning, design, or responsible supervision of construction, in connection with any public or privately owned structures, buildings, machines, equipment, processes, works or projects wherein the public welfare or the safeguarding of life, public health or property is concerned or involved, when such professional service requires the application of engineering principles and data.

The term "Land Surveyor" shall mean a person who engages in the practice of that branch of engineering commonly known as surveying and as hereinafter defined.

The practice of Land Surveying means that branch of engineering and applied mathematics which includes the surveying and measuring the area of any portion of the earth's surface, the lengths and directions of bounding lines, the contour of the surface, for their correct determination and description and for conveyancing or for recording, or for the establishment or re-establishment of land boundaries and the plotting of lands and subdivisions thereof; and like measurements and operations involved in the surveying of mines.

The Act specifies Exemption in Sec. 9 as follows:

"The following-named persons shall be exempt from the provisions of this act: (a) An employee or a subordinate of a person holding a certificate or registration under this act, or an employee of a person exempted from registration by class (d) or (e) of this section, provided the practice of such employee shall not include responsible charge of design or supervision; (b) officers and employees of any public utility corporation whose operations are under the jurisdiction of the public utilities commission, or any manufacturing corporation, while engaged in the performance of their employment by such corporation; (c) officers and employees of the government of

the United States while engaged within this state in the practice of the profession of engineering or land surveying for said government; (d) a nonresident of this state, practicing or offering to practice herein the profession of engineering or land surveying, when such practice shall not exceed in the aggregate more than thirty days in any calendar year, provided such person shall be legally qualified by registration to practice said profession in his own state or country in which the requirements and qualifications for obtaining a certificate of registration are not lower than those specified in this act; (e) a person resident in this state but whose arrival in the state is recent, provided such person shall have filed an application for a certificate of registration as an engineer or land surveyor and shall have paid the required fee therefor."

Many who are legally exempt will probably desire to apply for registration in anticipation of future activities. A Certificate of Registration is a certificate of professional recognition and standing.

Applicants are divided into several classes depending principally upon education and experience. There is also provision for Reciprocity with other states.

The Board has formulated its Rules and Regulations with those of other states as a general guide. It has called upon the Connecticut Technical Council as the representative of the principal engineering organizations, for counsel, and held a fruitful conference with its officers before deciding upon its procedure and rules. The Board regards itself as an agency of the Engineers in their endeavor through registration to elevate their profession and insure its better service in protecting public safety, health and property.

Questions which cannot be covered by specific rules will doubtless arise in the transition from present conditions, particularly in the evaluation of practice in engineering work which must be "of a character satisfactory to the Board." Clear and definite statements by the applicant and also by those who furnish references will contribute to prompt and fair decisions by the Board.

In response to your request, an Application Blank will be sent, together with Rules and Regulations, and a copy of the Act.

Edwin J. Beugler,
Secretary

To the State Board of Registration for Professional Engineers and Land Surveyors,

Edwin J. Beugler, Secretary,
Cheshire, Connecticut.

Please send me Application Blank for registration, together with Information Circular containing Rules and Regulations and copy of Public Act relating thereto.

Name .....

Address .....

.....

Date .....

(*Please typewrite or print in ink*)

Excerpt from Act: Effective January 1, 1936

"No person shall practice or offer to practice the profession of engineering in any of its branches including land surveying or use any title or description tending to convey the impression that he is a professional engineer or land surveyor unless he shall have been duly registered or exempted under the provisions of this Act." (Section 3.)

A Code of Ethics for Engineers and Surveyors

That the dignity of his chosen profession may be maintained and that proper service may be rendered individuals and the public, it is the duty of every engineer and surveyor:

1. To carry on his professional work, with fairness to all concerned, fidelity to clients and employers, and devotion to high ideals of personal honor;

2. To treat as confidential his knowledge of the business affairs or technical processes of clients or employers when their interests require secrecy;

3. To inform a client or employer of any business connections, interests or affiliations which might influence his judgment or impair the equitable quality of his services;

4. To accept financial or other compensation for a particular service from one source only, except with the full knowledge and consent of all interested persons;

5. To advertise only in a modest manner and with due regard to the dignity of his profession;

6. To refrain from using improper or questionable methods of soliciting professional work, and to decline to pay or accept commissions for work secured by such methods;

7. To avoid using unfair means to win professional advancement or to injure unjustly the chances of another to secure and hold employment;

8. To refrain from associating himself with, or allowing the use of his name by, any enterprises of questionable character;

9. To co-operate with engineers and engineering agencies in the dissemination of engineering information and experience;

10. To refrain from using the advantages of a salaried position in public service to compete unfairly with other engineers or suveyors;

11. To give due credit to work of other engineers when using or adapting their designs to projects in hand;

12. To consider his profession as affording him distinct opportunity to apply his special talents for the service of society.

An Appeal to the Board

President Steinman in an exchange of correspondence addressed himself to the chairman of the newly-created State Board of Registration in the following manner:

October 18, 1935

Dr. Chas. F. Scott,
Yale Station,
New Haven, Conn.
Dear Dr. Scott:

I gratefully acknowledge receipt of your letter of October 16th with enclosures, and sincerely appreciate your interest.

I note that you have secured legal approval from the Attorney General to classify your registrants. The point I wished to make, however, was that your law does not require you to classify, and it seems a pity to inject unnecessary complication or non-uniformity into registration procedure when not compelled to do so by the law.

I also note your arguments with respect to the so-called "practitioner" registered under the principle of the grandfather clause. The point to keep in mind in this connection is that these "practitioners" have not stepped out of their specialized branch of practice before the establishment of legal regulation and control, and there is even less inducement for them to step out into unknown fields of practice after they are registered; for registration imposes a sense of responsibility and holds open the possibility of revocation upon any showing of incompetence. There is no harm done in registering such "practitioners" as professional engineers, and the profession expects and understands a temporary lowering of standards during the period of operation of the grandfather clause. Moreover, many who will be registered under this same grandfather clause will be highly qualified professional men of established practice and standing. I would rather be generous to those you classify as "practitioners" than weaken the principle that engineering is a single profession, legally indivisible.

The paragraphs relating to examinations, which you quote from my article, are simply repeated from my discussion of the subject in the 1931 Proceedings of the National Council of State Boards, and were not included with any intended reference to your specific problem.

I note that your information circular states that your Board may *at its discretion* designate the branches or subdivisions of professional engineering in which it finds the applicant to be duly qualified, and I sincerely trust that your Board will exercise its discretion in the direction of deciding to omit any designation or classification. Uniformity of registration procedure is our goal, and the prevailing practice and consensus of opinion are for unclassified registration.

With all cordial regards,

Faithfully yours,

D. B. Steinman.

ITEMS OF GENERAL INTEREST

ENGINEERS PLEASE NOTE

(*Continued from page* 18)

lawyers who hitherto had been entitled to practice, and struck from the rolls of eligible attorneys every one who had not paid his dues or supported his obligations as a member of the integrated bar of Kentucky.

"The concept of the lawyer as the representative of private interests is changing. An increasing number of lawyers are engaged professionally in public office and on behalf of the public interest. There are important questions ahead of the country which need the guidance of the whole bar and not of a minority."

Comment

The New York State Society has, for some years, advocated emulation of the Canadian Engineering System. Since its inception the National Society has likewise developed its program in that direction. It is interesting and encouraging to note the reaction of the legal profession.

SCOPE OF REGISTRATION

Roster of States Having Laws

Following are enumerated the States which have enacted legislation regulating the practice of professional engineering, together with the names of the several State Societies located therein:

Arizona, Alabama, Arkansas, California.

Colorado—Colorado Society of Engineers, C. M. Lightburn, Sec., 252 Cooper Bldg., Denver.

Connecticut—Connecticut Society of Professional Engineers, James R. MacIntyre, Sec., care of Nash Engineering Co., South Norwalk.

Florida—Florida Engineering Society, W. W. Fineren, Gainsville.

Idaho.

Illinois—Illinois Society of Engineers, Prof. H. E. Babbitt, Sec., Urbana.

Indiana—Indiana Engineering Society, W. A. Knapp, Sec., Lafayette.

Iowa—Iowa Engineering Society, Prof. J. S. Dodds, Sec., Ames.

Kansas—Kansas Engineering Society, E. R. Dawley, Sec., Manhattan.

Louisiana—Louisiana Engineering Society, Frank A. Muth, Sec., 7705 Willow St., New Orleans.

Maine—Maine Association of Engineers, Bryant L. Hopkins, Sec., Waterville.

Michigan—Michigan Engineering Society, E. L. Brandt, Sec., 478 W. Alexandrine Ave., Detroit.

Minnesota—Minnesota Society of Licensed Engineers, Chas. L. Barker, Sec., University of Minnesota, Minneapolis.

Mississippi.

New Jersey—New Jersey Association of Professional Engineers, Ernest F. Weeks, Sec., 205 E. Fifth St., Paterson.

New York—New York State Society of Professional Engineers, W. A. Stubbs, Sec., 2952 Grand Central Terminal, New York City.

Nevada, New Mexico.

North Carolina—North Carolina Society of Engineers, care of St. College, Raleigh.

Ohio—Ohio Society of Professional Engineers, John Laylin, Sec., 1110 Wyandotte Bldg., Columbus.

Oklahoma.

Oregon — Professional Engineers of Oregon, K. B. Aldrich, Sec., U. S. Court House, Portland.

Pennsylvania—Pennsylvania Society of Professional Engineers, S. A. Keast, Sec., 4845 N. Eighteenth St., Philadelphia.

South Carolina—South Carolina Society of Engineers, A. E. Johnson, Sec., Columbia.

South Dakota—South Dakota Society of Engineers and Architects, Earl D. Dake, Sec., Rapid City.

Tennessee—Tennessee Society of Engineers, F. V. Ragsdale, Sec., Dermon Bldg., Memphis.

Utah—Utah Society of Professional Engineers, Ralf R. Wooley, Sec., Federal Bldg., Salt Lake City.

Virginia.

West Virginia—West Virginia Society of Professional Engineers, Robt. Williamson, Jr., Sec., Box 252, Charleston.

Wisconsin, Washington.

Wyoming—Wyoming Engineering Society, Henry Lloyd, Sec., Cheyenne.

Engineers' Laws Revised or Amended in 1935

California—(Amended).

Indiana—(New law, replacing original law of 1921).

New York—(Amended to curb exemption of corporation).

West Virginia—(Amended).

Wisconsin — (Revised to eliminate classification into branches of engineering).

New Engineers' Laws Enacted in 1935

Alabama.
Connecticut.
Maine.
New Mexico.
Oklahoma.
Utah.
Washington.

(All establishing registration of "professional engineers" without classification.)

MESSAGES TO PUBLIC

President Steinman Approves

Editor of Citizen:

"Of all men necessary to the onward march of civilization, the engineer fills a unique place in the true progress of society.

The professional engineer is different from a doctor or lawyer in this respect: He does not theorize and propose without any promise of accurate results for he will know the results and the outcome of any proposition he entertains before any work is started. For this reason he is at last coming into his own and his legal status in the State of Ohio, and most of the states of the Union, will place society on a more secure foundation and lift civilization up to a higher plane of individual endeavor."

Progress.

The foregoing letter, published on the editorial page of the Columbus Citizen, issue of October 24, indicates one method whereby the individual engineer may help to get the message of the profession across to the public. If thousands of engineers will write similar letters to the editors for publication in their local papers, valuable educational publicity on behalf of the engineering profession will be secured.

A REQUEST

From D. B. Steinman, Pres., N. S. P. E.

In my recent article on Engineers' Registration, I stated: "The courts have repeatedly disqualified men offering engineering testimony when such 'experts' were found to be unregistered." This statement is correct, and is based on numerous cases reported to me from time to time by Professional Engineers. I neglected, however, to record the citations of the specific cases. Recently I have received a number of requests from Engineers and Attorneys for specific citations to be used as precedents in court. I am therefore taking this opportunity, in the columns of the American Engineer, to broadcast a request for such specific citations. The information should include the name of the case, the court, and the date. All Engineers who have such information or can secure it are requested to communicate it to me.

A PRESS ITEM

(*Continued from page* 18)

While the present works progress program does not contemplate high-cost engineering projects, each State has numerous problems of a minor engineering nature which have baffled some of the local administrators. These include highway work, small buildings, bridges, airplane fields and work of a similar nature.

1,100,000 *Directly Employed*

With only 1,100,000 persons directly employed from the $4,000,000,000 work-relief fund, Hopkins finds the slowness of work in the States jeopardizing the main objective of the employment drive. Of the total number employed with relief funds, only some 400,000 are engaged on W. P. A. projects, the remainder being enrolled in the C. C. C. and on work for which Federal departments have received allocations.

At the time Col. Harrington's appointment as chief engineer was announced officials denied that it was contemplated borrowing any other Army engineers.

It was recalled that when the old C. W. A. program, which put 4,000,000 men to work, began to flounder, Hopkins, who directed that program, sent out an SOS signal to Army engineers. Without their aid it was doubtful if the program could have been carried out.

Situation Still More Serious

The situation today is even more serious, a fact which President Roosevelt recognized in putting Maj. Gen. Markham in charge as engineering consultant. How this was kept under cover was revealed by the fact that Hopkins' order to State administrators was issued as late as October 2. The only information obtained today at headquarters here was to the effect that a press statement will be made later.

Maj. W. F. Tompkins was designated the consulting field engineer for Maryland, the District of Columbia and Virginia. This territory will include also Delaware, North and South Carolina.

CIVIL OR PROFESSIONAL ENGINEER

(*Continued from page* 18)

better if the Universities spent the entire four years giving the boys a thorough ground work in mathematics, the sciences and the so-called Liberal Arts, than to turn out untrained experts in any one of the branches of engineering? Ninety percent of the boys cannot possibly know in advance when they start college what kind of a job they will get when they have finished their course. If they specialize in Electrical, Mechanical or Structural Engineering they may get a job with a Surveyor.

After the boys are through college or technical school, business, industry and the civil engineering profession itself have a responsibility in seeing that these boys are given the opportunity for the practical training that will enable them to pass their examinations and obtain licenses to practice "Civil Engineering."

Very truly yours,
(sgd) A. J. Foote."

OBLIGATIONS AND OPPORTUNITIES

(*Continued from page* 14)

in the profession. The reason given for the resignation is the requirement that membership in the State Society involves membership in the National Society, and that the latter is attempting to do the work of the American Engineering Council. The objectives of the State Society and the National Society are practically alike, the latter being but a logical extension of the activities of the former along National lines. It is difficult to understand how the Dean, who has subscribed to the State Society as a charter member, can justify his action except through a misunderstanding of the National Society's function. The resignation is now being reconsidered and we are hopeful that it will be withdrawn. This incident, however, emphasizes the work that lies before us in uniting our own engineers.

We claim a glorious heritage of efficient service to society, which the public will readily acknowledge, but have we given the utmost of ourselves in endeavors in which we are peculiarly qualified to contribute? The interests and problems of human relationships are too widespread and interrelated to permit the engineer to stand by complacently, and feel that he has done his part when he has supplied the technical wants of his community. It is our responsibility as citizens and engineers to take an active interest in the governments of our nation, state and municipality and to offer whatever assistance our profession may provide for increasing their efficiency and progress. In our daily experience we see continued evidence of waste, ill-considered attempts at regulating the life of our people, irrational planning, incompetent direction and control, all of which are repugnant to the engineer, who by training and experience is most suitably qualified to eliminate these wrongs and furnish effective leadership in the planning and execution of social and economic programs. We find in legislative bodies, and on public boards and commission representatives of all professions, trades and vocations but that of the Engineer. The incongruity of this condition can be readily recognized by the general public if only the engineer will organize to the fullest extent, and by an extensive campaign of publicity and education apprise his fellow citizens of his readiness to enter the broader sphere of public life. The standing of the profession will be advanced in direct proportion to its contribution to the public welfare. The writer is confident that the future of the registered engineer is filled with promise and achievement, and pleads for the wholehearted cooperation of a united profession in bringing this about at an early date.

SHALL REGISTRATION CLASSIFY ENGINEERS

(*Continued from page* 11)

branch or specialty in which he may engage; instead we expect the board of examiners to make sure, before granting a license, that the man can be trusted not to engage in any specialized work in which he may not be qualified.

The same principle has long been established in the medical profession. That profession has firmly and consistently resisted every suggestion of legal division or superqualifications into specialties. Self-limitation of field of practice has been kept a matter of professional honor, and legal limitation has been rejected.

Others may wish to emphasize the diversification of engineering into specialties. It is for us to proclaim the fundamental unity of our profession. Whether a man writes "E.E." "C.E." "M.E." "E.M." or "Chem.E." after his name, he has the same common basic educational training, the same governing professional qualifications, the same method of analytical approach to technical problems, the same ideals of professional practice, and the same interest in the profession's problems of public recognition, protective legislation, and relations with other professions.

Law and medicine have as many specialties as engineering, but lawyers and doctors would never approve of the legal subdivision of their professions.

Consider the medical profession: If you go to an oculist, he will refuse to treat an ear case; he will send you to an otologist. An otologist will refuse to treat a nose and throat case; and so it goes along the line. Medicine has as many specialties as there are organs in the human body. Nevertheless, *there are no laws dividing the medical profession into specialties*;— they leave it to professional ethics and the power of self-appraisal in the professional man to limit his own sphere of practice. Cannot the same be true of the Engineering Profession? Does the bridge engineer fear the competition of the chemical engineer? Cannot the Registered Engineer be trusted?

Registration can and should be used to proclaim the essential one-ness of our Profession. It is the most effective instrumentality for impressing upon lawmakers, officials, and the public that Engineering is *one* Profession.

QUALIFYING ENGINEERS

(*Continued from page* 15)

demonstrate the fallacy of too early intensive training. Reviews of the personnel of departments of public works have repeatedly shown that a large percentage of those engaged on the design and construction of sewers, highways, bridges and similar projects have had intensive scholastic training in electrical, chemical and mechanical phases of the profession, and those engaged on electrical, chemical or mechanical work originally intended to become specialists in what is termed civil engineering. This condition undoubtedly prevails generally and merits consideration.

The requirements, the opportunities and the personal proclivities can rarely be known before the individual has made an excursion into the world of practice. The problem of the young engineer is as much one of conditions as is that of any young lawyer, doctor or architect. He must find himself, before choosing a specialty, if his career is to justify that choice.

It is manifestly unfair, for the profession as a whole, as well as for the school, to hold out promises with little or no assurance of their fulfillment.

The efforts of every engineer should be directed in the common interests of society and profession. School, Examining Boards and Professional Associations must collaborate in developing the engineer of tomorrow. The latter must be a socially minded person capable of administration and fundamentally trained for active participation in public affairs. He must be a cultural and spiritual person as well as a trained specialist. This demands a liberal training as well as a thorough understanding of mathematics, physical sciences and the fundamental principles common to all branches of engineering. Such should be the common denominator by which all engineers can be measured. Individual skill, specialization and responsibility must be developed upon a base which merely indicates that a person has given evidence of fundamental qualification sufficient to safeguard society. Specialization should come after sufficient experience to enable practice and study to be combined.

Because of the common purposes and the political framework of the State professional bodies which form the National Society of Professional Engineers, the development on a National scale of reasonably uniform training qualifications and practices can be greatly advanced through the medium of this society. There will probably never be absolutely identical conditions in any two states any more than are identical medical acts, legal practices, election statutes or divorce laws. However, the need for reciprocity in the case of engineers is sufficiently great to merit the utmost co-operation between all states. To bring this about the National Society is better suited than any other agency in the country. It must seek to reconcile divergent opinions, not so much of engineers, but of the general public, whose voices are the legislatures of the several states.

The writer has been intimately identified, from its inception, with a movement which had its birth in a county, its adolescence in a state and now its maturity in the nation. Throughout the years the objectives have been definite and social and of concern to both public and profession. Today it offers the only fundamentally sound approach to the solution of the professional, economic and social problems which are at once the opportunity and the responsibility of those whom the state has certified as professional engineers dedicated to the service of Society.

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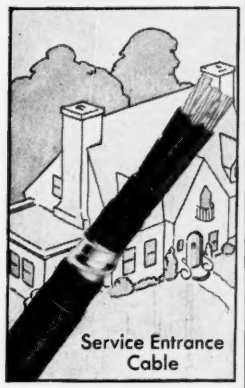
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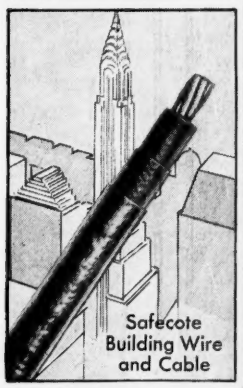
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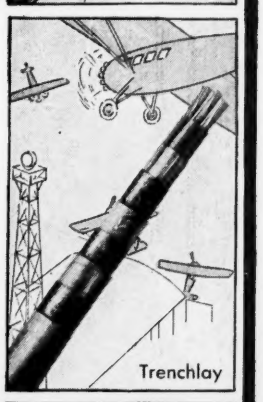
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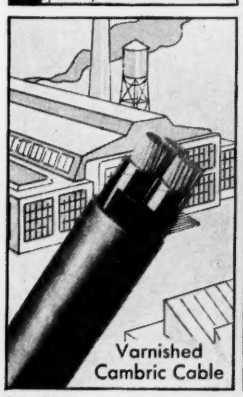
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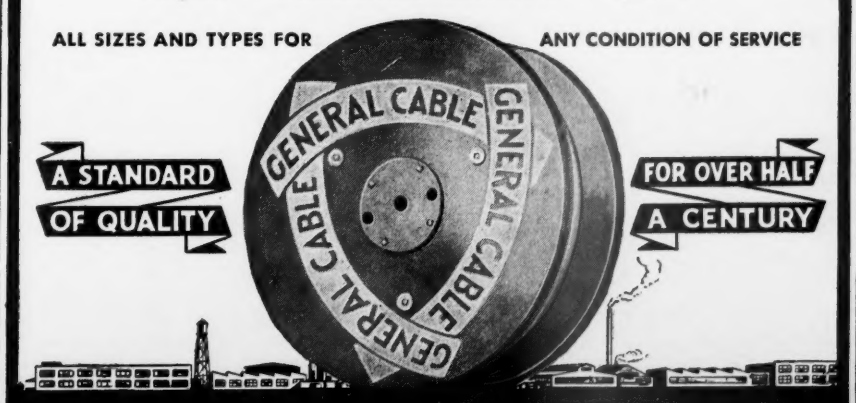

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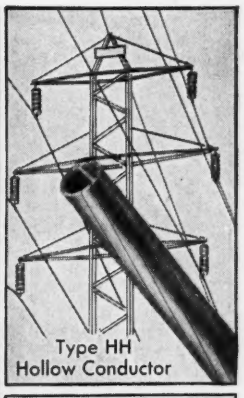
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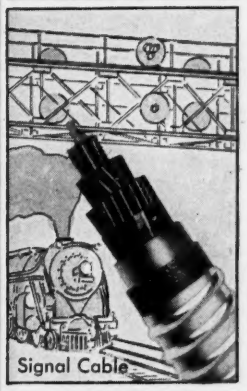
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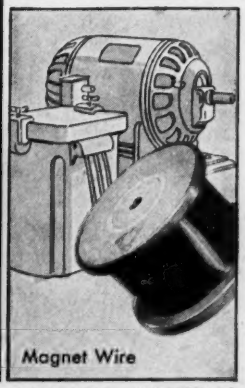
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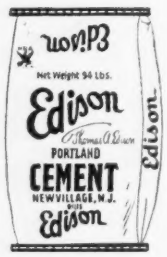

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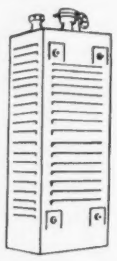

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